DOCUMENT RESUME

ED 168 981 SP 013 920

TITLE	Research and Development Centers and Regional Educational Laboratories. Strengthening and Stabilizing a National Resource. Final Report.
INSTITUTION	National Inst. of Education (DHEW), Washington, D.C.
SPONS AGENCY	Congress of the U.S., Washington, D.C.
PUB DATE	Jan 79
NOTE	180p.; Not available in hard copy due to marginal legibility of original document
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Educational Assessment; *Educational Research; Equal Education; Financial Support; *Government Role; Information Dissemination; Policy Formation; *Regional Laboratories; *Research and Development Centers; *Research Utilization
IDENTIFIERS	National Institute of Education

ABSTRACT

In this report of the Panel for the Review of Laboratory and Center Operations to the director of the National Institute of Education, the results of site visits and reviews of long range plans of 17 research and development centers and regional educational laboratories are analyzed. Following a brief overview of the history of educational research and development, three major topics are discussed in detail. The first of these presents recommendations for the support of individual laboratories and centers. The second topic addressed concerns the management of NIE's relationship with the laboratories and centers and offers recommendations. The special importance of dissemination and equality of educational opportunity is the subject of the third portion of the report. (JD)

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RESEARCH AND DEVELOPMENT CENTERS AND REGIONAL EDUCATIONAL LABORATORIES:

STRENGTHENING AND STABILIZING A NATIONAL RESOURCE

Final Report of the
Panel for the Review
of Laboratory and Center Operations

Submitted to the
United States Congress
and the Director of the National Institute of Education

January 1979

SP013920

Executive Summary

The Purpose of the Panel

In 1976, as part of the legislation extending the authorization and mandates of the National Institute of Education (NIE), Congress established a panel of educators to review and report on the 17 regional educational laboratories and research and development centers created by the U.S. Office of Education (USOE) in the mid-1960's. These institutions now receive significant funding from NIE. The authorizing legislation, Section 405 of the General Education Provisions Act as amended by Section 403(d) of the Education Amendments of 1976, 20 U.S.C. 122e, charges us, the members of the Panel for the Review of Laboratory and Center Operations, to

i. review, and prepare recommendations on, initial long-range plans submitted [by laboratories and centers]...;
ii. review the operation of the laboratories and centers receiving assistance under this subsection and make recommendations for the improvement and continuation of individual laboratories and centers and for the support of new laboratories and centers; and
iii. not later than January 1, 1979, submit a final report to the Director of NIE and to the Congress containing such recommendations as the Panel considers appropriate and such interim reports as the Panel considers appropriate.

Following legislative prescriptions, the Director of NIE appointed 15 members to the Panel in August 1977 from a field of 450 candidates nominated by organizations and associations in the educational community. (See Appendix A for the authorizing legislation, the Panel's charter, and information on the Panel.)

The Panel's Activities

We have met 11 times since September 1977. In January 1978, at the Director's request, we submitted an Interim Report containing reviews of the initial long-range plans of individual laboratories and centers, which were solicited by NIE in March 1977 (Appendix B). Between April and October 1978, teams of Panel members visited laboratories and centers and submitted reports on the mission, governance, projects, and financial management of each institution (Appendix C). In addition, we have met with NIE's policymaking body, the National Council on Educational Research (NCER), and heard from many members of the educational research and development (R&D) community. In this report we present the findings, conclusions, and recommendations from our work through January 1, 1979. By September 30, 1979, we shall make the mandated recommendations for the support of new laboratories and centers, with particular attention to means of providing nationwide coverage of R&D services. We shall also report further on issues of dissemination and equality of educational opportunity.

Findings and Conclusions

Conclusion 1: The Panel strongly endorses the concept of research and development centers and regional educational laboratories and affirms the importance of maintaining and improving the stability

and quality of the existing institutions. While finding considerable differences among the individual centers and laboratories as to their strengths and weaknesses, we find most of them now ready for long-term relationships with NIE.

We found a vigorous set of research and development institutions doing work of quality and significance for American education. We had not anticipated this conclusion; we approached our task with full knowledge of the considerable controversy we had been asked to address. To be sure, we did not find perfection; in fact, there are substantial differences among the laboratories and centers as to their strengths and weaknesses. Nevertheless we saw evidence that many are providing:

- research that will lead to improved educational practice;
- products that are being used to improve instruction, curriculum, testing, and career choices;
- technical assistance such as training, development, and collaborative problem solving to help States and schools in their improvement efforts; and
- dissemination of research findings and products.

These accomplishments attest to our conviction that the experience of the last 15 years has affirmed the need for R&D centers and strengthened the rationale for regional educational laboratories.

Conclusion 2: The Panel endorses the fundamental distinctions of purpose between the R&D centers and regional educational laboratories.

The Panel finds virtue in maintaining the distinction between the purposes of laboratories and centers. We have seen and find desirable the considerable overlap in their activities. Nevertheless we affirm the need for the two types of institutional capacity. Centers should direct their efforts within an educational problem area of national importance, initially determined by NIE. Through emphasis on basic and applied research, centers should exercise national leadership in their problem areas. This research could lead to appropriate development and dissemination activities related to the problem area.

Laboratories, in contrast, should address a larger spectrum of educational problems. These problems will be defined by their regional constituents. In pursuit of their priorities, laboratories are likely to engage in a mix of applied research, development, evaluation, technical assistance, and dissemination activities.

Conclusion 3: The Panel finds that the stability and quality of the centers and laboratories, as well as the effectiveness of their efforts, depend heavily on Federal policies and procedures for their financial support, their monitoring, and the setting of their R&D priorities.

Where the Panel has found weaknesses in the work of the centers and laboratories, we find past Federal policies for their support to be partially accountable. Considerable confusion surrounded the establishment of laboratories in particular. Federal conceptions of their purpose were diverse; truncated funding fostered early attrition. More recently, cuts in NIE appropriations resulted in reduced funding for both centers and laboratories. A significant problem has been the "program purchase" policy adapted by NIE from USOE proposals. By providing fund-

ing on a project-by-project rather than an institutional basis, this policy has tended to dilute laboratory and center institutional missions, unduly favor federally determined priorities, compromise planning capabilities, and encourage some institutions to become educational "job shops."

Conclusion 4: The Panel commends the National Institute of Education for its progress in developing new and responsive policies and procedures for the management of its relationship with centers and laboratories.

We find that the policies now emerging from NIE take into account past problems and promise to correct them. We are impressed and pleased with the responsiveness of the new leadership of NIE to our concerns and those of the laboratories and centers. For example, the Institute:

- has created an office coordinating laboratories and centers that has proved effective in communicating with those institutions and solving problems, and
- has initiated a policy of institutional monitoring that enhances the treatment of centers and laboratories as institutions rather than as collections of projects.

Moreover, through dialog with the Council for Educational Development and Research (CEDaR) and the larger educational community, NIE is now completing the development of procedures for implementing the 1976 NCER policy on special institutional relationships. Through these procedures, NIE will enter into long-term institutional agreements with qualified laboratories and centers. These procedures promise to acknowledge the strengths of centers and laboratories that we observed and correct the weaknesses of past policies.

Conclusion 5: The Panel affirms the importance of educational R&D in improving American education and finds too few resources devoted to this enterprise.

Our focus has been on the laboratories and centers. But we do not wish to ignore—or encourage others to disregard—the larger R&D system of which they are a part. The impact that centers and laboratories have had on our Nation's schools and colleges reinforces our belief in the importance of educational R&D and in the even greater benefits that will result in the long run. The sponsorship of this research is primarily a Federal responsibility. But we find Federal appropriations inadequate, not only in relation to the challenge of improving our educational system but also in comparison with Federal subsidies of R&D in other areas.

Recommendations

Our conclusions lead us to particular recommendations for the support of each laboratory and center and more general recommendations on the policies and procedures for their support.

Recommendations on Individual Institutions

Based on reviews of long-range plans and site visits, the Panel makes summary recommendations for the support of each center and laboratory. In all cases we point to areas of strength and weakness to which NIE and the institution should attend.

The Panel recommends that NIE enter into long-term institutional agreements with

seven of the nine centers and with seven of of the eight laboratories. For the remaining institutions, we recommend appropriate planning or strengthening aimed at leading to such an agreement.

Recommendations on Policies and Procedures To enhance the stability and quality of the R&D centers and regional educational laboratories and improve the effectiveness of their efforts, we direct recommendations in the following areas to NIE and the centers and laboratories.

To provide *institutional stability*:

- NIE procedures for the support of the research and development centers and regional educational laboratories should encourage stability and enhance the institutional character of their missions and functions:
  a. the basis for support should be a long-term institutional agreement;
  b. the agreement should last for 5 years, renewable for the same period after the 3d year upon favorable review;
  c. the agreement should commit NIE to a level of institutional and project support that allows the center or laboratory to function viably in pursuit of its mission.
- Funding instruments for regional educational laboratories should contain a management fee or features that resolve the problems resulting from the lack of such a fee.
- NIE should encourage laboratories to seek support from their regions for activities closely related to their missions.
- NIE should encourage laboratories and centers to subcontract or decentralize their functions when to do so serves the stability of the institution or the pursuit of its mission.

To ensure *accountability and quality*:

- NIE should actively ensure that governing and advisory bodies of centers and laboratories are strong and are representative of the institutions' clienteles, including representation through recognized teacher and parent organizations.
- NIE should conduct external reviews, involving appropriate peers and practitioners, to supplement the accountability provided by governing and advisory structures.
- NIE should periodically reassess the priority areas addressed by centers and phase out the institutional agreement when the area no longer warrants special priority.
- In the 3d year of a long-term institutional agreement, NIE should conduct a rigorous onsite review involving external peers to assess the quality of institutional and programmatic functions:
  a. upon a negative review, 2 years for collaborative strengthening with NIE should be allowed;
  b. upon a second negative review, the NIE institutional agreement should not be renewed.

To enhance the *setting of laboratory and center priorities*:

- Laboratories, through strong and representative governance structures and utilization of needs-sensing activities, should be the primary agents in setting their priorities.
- Centers, through consultation with scholarly and practitioner interests in their respective fields and in collaboration with NIE staff, should be the primary agents in

establishing strategies and programs in pursuit of the mission initially determined by NIE.

- NIE should discourage centers and laboratories from undertaking activities not closely related to their central missions.
- The NIE office coordinating centers and laboratories should encourage more systematic communication among those institutions to assure integration of their activities and prevent unnecessary duplication of effort.

To enhance the *setting of NIE priorities:*

- NIE should develop a more systematic and participative process of setting its priorities, one which builds actively on the capacity of centers and laboratories to identify needs and problems.
- NIE should ensure that its curriculum development policy is understood by the field and NIE staff, should monitor the implementation of the policy, and, if necessary, should modify the policy to allow needed development activity.

To enhance NIE's *monitoring* of laboratories and centers:

- The NIE policy of institutional monitoring should be continued and strengthened through:
  a. assigning institutional monitors as a full-time or primary responsibility;
  b. assuring access and accountability of the institutional monitors individually and collectively to the Office of the Director of NIE.

To enhance the *dissemination* and impact of laboratory and center efforts and R&D generally:

- As NIE continues to strengthen the educational R&D network through State capacity-building efforts and programs such as the Research and Development Exchange, it should encourage and support laboratories to assist each State in the region served to establish effective dissemination procedures.
- NIE should facilitate center and laboratory efforts to coordinate their dissemination work with existing networks while working with other elements of the HEW Education Division to establish greater coordination among all Federal dissemination programs.
- To enhance its impact and serve as a model for the education community, NIE should develop a comprehensive policy on its role in dissemination, should conduct programs that are consistent with that policy, and should implement effective procedures for the dissemination of the results of the R&D it supports.

To enhance the contribution of laboratories and centers to *equality of educational opportunity:*

- In implementing its policy on improving equal educational opportunity, NIE should encourage increased attention of centers and laboratories to substantive equity problems in their research, development, and dissemination activities and increased awareness of the implications for equity of all of their R&D.
- NIE and the centers and laboratories should strengthen the effort to educate women and minorities for careers in educational R&D.
- Consistent with affirmative action plans and equal employment regulations, NIE should continue to move aggressively to

encourage equitable representation of women and minorities on the staff and governing and advisory bodies of centers and laboratories.

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I: Introduction

To review "laboratory and center operations" is to review the rise of educational research and development (R&D) in America and the Federal role in that process. We came to the conclusions that frame our recommendations through exploration of this historical and political setting. Here we share our sense of that context.

EDUCATIONAL R&D IN AMERICA

Although educational research dates from the 19th century, it has only recently become an enterprise of any consequence. Significant Federal support for research in education began in 1954, but it took until the mid-1960's for it to gain momentum.[1] Current sponsorship is large by international standards and has grown impressively since World War II. But the $1 billion spent by the Federal Government on educational research between 1950 and 1970 must be contrasted with $7 billion for agricultural research and $14 billion for research on health. Moreover, it comprises less than .3 percent of the total outlay for education.[2]

America expects a lot from its schools. But high expectations in the face of rising costs and increasing problems have led to substantial disenchantment with our educational system. And as no easy solutions to immediate problems emerged from research, faith in it began to wane as well. Despite the creation of a separate agency—the National Institute of Education (NIE)—for educational R&D in 1972, Federal support in real dollars has actually declined since 1968.[3]

Our experience as a Panel convinces us not only of the need for educational R&D, but also that the original faith in it was well founded. We believe that a well-balanced and well-executed educational R&D program is vital to the national interest. We will argue this case for the particular domain of laboratories and centers. But we wish to point to some considerations—and some evidence—that bear on the need for and impact of educational R&D more generally.

Of the many problems that beset our schools, few can be solved except through improving our knowledge. To be sure, dramatic changes can result from court decisions, such as the one banning segregation. But even that decision was based in part on research findings.[4] To improve the literacy of our high school graduates, to devise equitable formulas for school finance and student aid, to reduce violence and vandalism in urban schools, to improve the educational opportunities of low-income and minority students, and to forge better paths from school to work—all these problems require creation of new knowledge for their solution.

Has educational R&D contributed to the resolution of these and other problems? In the absence of breakthroughs comparable with moon shots, many think not. That view seems to have influenced funding decisions in the 1970's for Federal support. But we perceive a considerable lack of awareness of the extent to which research has already had an effect. And we find little appreciation for the complex and gradual ways in which these effects take place.

Fortunately, the impact of educational R&D has itself become a topic of increased study. Two recent works support our faith in the

usefulness of that R&D. In a 1977 report to NIE, a committee of the National Academy of Sciences traced the subtle patterns of influence of basic research on educational practice and found basis for recommending increased Federal funding for this work.[5] More recently, a series of case studies conducted by the National Academy of Education demonstrated the links between basic theoretical inquiry in a number of areas and improvements in schooling practices.[6]

As evidence mounts for the impact of basic research in education, Congress itself shows increasing faith in another form of R&D. Based on the success of program evaluations such as the Compensatory Education Study, the Education Amendments of 1978 direct NIE to undertake a variety of policy studies.[7] As for the impact of development, we can speak more directly from our own experience. Our site visit reports on the R&D centers and regional educational laboratories describe a truly impressive array of activities and products that direct the flow of more basic knowledge into our Nation's classrooms. More than one member of our Panel was skeptical of the usefulness of such products at the outset of our inquiry. But we came away from our site visits with enthusiasm for benefits of many of the activities that have come to be known as educational development.

We recognize that educational R&D is still at an early stage of growth. But we are firmly convinced that the results thus far justify the added resources necessary to bring this area of inquiry into full maturity. Increased funding is all the more necessary because the lack of adequate resources tends to foreclose experimentation on the most effective styles and strategies of educational R&D. We have seen, for example, the need for fundamental work of potential long-range payoff pitted against work of more immediate relevance, to the detriment of both.[8] This struggle has resulted in the imposition of unrealistic timeframes for the more basic work while casting doubt on the quality of the applied work. Such competition can be healthy only in the context of a substantially higher level of support for educational R&D.

That degree of support can come only from the Federal Government. The reasons are simple. The States are the primary political units for elementary and secondary education. Typically, States delegate authority to and share finances with local districts. In the face of persistent demands for direct educational services and competing claims against the resources for education, funding for activities with a long-range payoff and not of purely local interest tends to be meager. As a result, less than one-fourth of the expenditures for educational R&D comes from State and local sources.[9] That degree of support is unlikely to increase.

But no level of funding or degree of maturity will reduce the controversy and conflict about and within educational R&D. Nor should it. During our conversations with teachers, administrators, researchers, developers, and policymakers at many different levels in the system, we observed widely divergent views of what research is and what should be done to improve its effectiveness. That debate is inevitable and desirable. There is ample room for value differences and divergent views on research within the broadly decentralized educational system of this country. However, the Federal responsibility for financing educational research creates a dilemma to which we became especially sensitive in reviewing laboratories and centers. How can one ensure that Federal priorities in research reflect State and local interests? We will

return to that question more than once in our recommendations.

THE RISE OF INSTITUTIONAL CAPACITY

Federal educational research programs began in traditional ways.[10] During the late 1950's and early 1960's, the management of the educational research effort at the Federal level consisted chiefly of project proposal submission followed by panel review, with the best proposals receiving support up to the limit of the appropriation. Increasingly, however, it became apparent that, although good work could be supported in that fashion, there were limits to that approach. Within the U.S. Office of Education (USOE) and its advisory bodies, concern about the fragmentary, inconclusive, and noncumulative character of the overall research effort began to mount. The project approach did not seem to be closing the gap between research and practice. Research knowledge was not being incorporated into curriculums, instructional approaches, or organizational designs for education. Furthermore, R&D efforts were not yet visibly attracting the variety of personnel from the behavioral and social sciences desirable in light of the complexity of the apparent problems. In short, concerns about scale of effort began to emerge.

The Research and Development Centers

The establishment of the Research and Development Centers Program in 1963, under the authority of the Cooperative Research Act, was the first attempt to deal with these problems. By 1966 eleven R&D centers had been established by USOE.[11] These centers were expected to overcome the shortcomings of individual project support in three basic ways.

First, the R&D centers represented a solution to a management problem. The mechanisms then supporting individual projects were believed to create artificial barriers to impact. By supplementing small-scale project activities with broader programs of interrelated activities at a single site, the centers were designed to mount programmatic attacks on a major problem area over an extended period of time. In this manner work could continue independently of project-by-project funding. It was also thought that institutions with the capability for planning and evaluating their own work could reduce unproductive delays and increase the cumulative impact.

Second, there was recognition of the need to approach educational problems from the perspective of a variety of disciplines and from multiple points of view within a single discipline. An institutional attack on problems enabled not only increases in scale, but different combinations of talent as well.

Finally, centers were expected to follow what was then felt to be the internal logic of R&D by carrying their efforts forward into applied research, exploratory development, and dissemination of the results.

The Regional Educational Laboratories

The impetus for a second form of institutional R&D capacity came from the Gardner Task Force appointed by President Lyndon B. Johnson to make proposals on Federal education policy.[12] Its judgment, endorsed by congressional legislation in 1965, was that a new

agent was needed to stimulate and support the cooperation of the varied participants in the educational process. Educational change was viewed as complex and multifaceted, involving institutions as diverse as individual schools, local districts, teacher education institutions, State agencies, and commercial enterprises. An instrument was needed to coordinate the many interests of the participants. Like the centers, the labs were to conduct sustained, programmatic attacks on educational problems. But their emphasis was to be on applied work, creating the partnership necessary to harness research and development for the improvement of educational practice.

There were conflicting perspectives on the role of the laboratories, however. Should they be regional or national in orientation? Should there be a few "centers of excellence" or nationwide coverage? Guidelines issued by USOE in August 1965 temporarily resolved these issues: 13 months later, 20 regional laboratories were in various stages of operation.[13]

A HISTORY OF INSTABILITY AND CONFLICT

The diversity of views on educational research is mirrored in the history of laboratories and centers. We found a remarkable degree of conflict over Federal priorities in this area, as well as dramatic flux in forms and levels of support.

The history of the laboratories, in particular, illustrates the instability and conflict that resulted from multiple and changing Federal intentions. From a purely administrative perspective, the laboratories had no consistent base. Prior to the transfer of authority to NIE in 1972, USOE reorganizations had shifted labs from the Bureau of Research and Development to the National Center for Educational Research and Development. Changes in senior leadership outpaced these shifts. The USOE units had a half dozen leaders between 1965 and 1972. NIE has already had three Directors. As personnel changed, so did priorities.[14]

The lack of original consensus on a blueprint for the laboratories exacerbated the instability in Federal expectations of what roles labs should perform. Poor communication among policymakers further fragmented the effort. (For example, the USOE task force established to implement the laboratory program was never given complete access to the Gardner Report.[15]) Debate over regional versus national orientation persisted, as did disagreement over the kinds of regional services laboratories were to provide. The establishment of the laboratories proceeded with incredible haste, and the controversy over their purpose became intertwined with the debate over the quality of these quickly established institutions.

The first of a series of policy assessments and institutional reviews, which continue to characterize the history of both centers and laboratories, occurred when John Gardner, then Secretary of the Department of Health, Education, and Welfare (HEW), appointed a National Advisory Committee on Educational Laboratories in 1966. That group was asked to provide general policy guidance and an assessment of strengths and weaknesses of the program. Simultaneously, he commissioned an independent investigation of the laboratory program by Francis Chase, Dean of the University of Chicago School of Education. Both these events were milestones in the linkage of laboratories to the research and development centers. Already administered by the Division of Educational Laboratories, the

centers were included by Chase in his review. Then in 1968 the National Advisory Committee received oversight responsibility for the centers as well.

Reports from both the Committee and Chase affirmed the need for and the high potential of the laboratories, while pointing out the difficulties caused by the circumstances of their establishment.[16] Nonetheless, debate over the conception and quality of laboratories (and centers) remained ripe throughout subsequent years. Additional reviews followed, including a second review by Chase.[17]

These reviews—like that of the Panel—must be viewed in light of the characteristics of educational R&D already noted. Debate over ends, means, and quality is the norm rather than the exception. That is healthy. But that debate has been intensified by levels of funding that were far less generous than expected. In the case of the laboratories, hopes for expanding allocations were dashed by competing Federal priorities, including the Vietnam War. Funding for the laboratory program was truncated in 1968; these reductions led to decisions to cut off funding for five of the laboratories. This began a process of attrition which has left only 8 of the original 20 in operation today.[18]

The 1972 shift to NIE of management responsibility for centers and laboratories did not lessen the instability of support. Prior to that change, USOE had initiated a review of all laboratory and center projects to give some firm basis for future funding decisions. That review was completed by NIE under a new policy. Based on USOE plans for an "Institutional Support and Evaluation Policy," it shifted laboratory and center funding from an institutional to a project basis.[19] The rationale was that, as the existing institutions matured, they would require subsidy only for projects, as opposed to the core support necessary for earlier development. With some modifications, NIE adopted this philosophy into the "program purchase" policy.[20]

The Panel views this policy as a major factor in the lessening of stability of the individual laboratories and centers and in the weakening of their sense of institutional mission. Laboratories, in particular, began to operate as educational "job shops," which further loosened ties to their respective regions. Moreover, the policy allowed Federal priorities to be favored over local and regional ones.

A significant step toward resolving these problems emerged from the commissioning in 1975 of ten consultants by the policymaking body of NIE, the National Council on Educational Research (NCER), to review the educational R&D support policies of the Institute with special reference to the centers and laboratories. The resulting Campbell Report led to an NCER resolution in 1975 (later revised in July 1976) giving the NIE Director authority to establish "special institutional relationships" when they are considered important to achieve the mission and objectives of the Institute.[21] Although the resolution emphasizes that such relationships should reflect a variety of purposes and means of accomplishment, it singles out existing regional laboratories and R&D centers for special consideration as candidates. Thus, NIE was given a policy basis for support of the laboratories and centers as institutions instead of collections of projects.

Following congressional mandate, in March 1977 NIE solicited long-range plans from the laboratories and centers using guidelines reflecting that policy. As its first major activity, the

Panel for the Review of Laboratory and Center Operations was asked in September 1977 by the new NIE Director to review the submitted plans. Our January 1978 Interim Report is the response to that request (see Appendix B). Since that date the Panel has witnessed major progress in the evolution and implementation of procedures based on NIE's new policy of institutional support. After conversations with the Panel, NCER, laboratory and center staff members, and the Council for Educational Development and Research (CEDaR), the organization that represents all but one of the centers and laboratories, NIE is developing comprehensive guidelines for the management of its institutional support. These guidelines promise to remedy problems of the past and lay the foundation for the stable and mutually beneficial relationships that the centers and laboratories seek. Therefore, in many instances our recommendations will simply affirm procedures already established. For example, the Institute created an office coordinating laboratory and center support that is effective in communicating with those institutions and solving problems. Moreover, NIE initiated a system of institutional monitoring that enhances the treatment of centers and laboratories as institutions.

The Panel commends NIE for its progress in implementing the policy of "special institutional relationships." Such action promises to end the instability and conflict that have characterized past support of the R&D centers and regional educational laboratories.

Reviewing the Need for Laboratories and Centers

The Panel's charge orients it toward the improvement of the 17 laboratories and centers rather than an assessment of alternative strategies for conducting R&D or a consideration of the R&D system as a whole. Nonetheless, we have paused from time to time to reflect on broader and more basic questions, and we have had to think about how centers and laboratories should conceive of their roles and purposes. Therefore, we would like to offer some fundamental impressions that we formed during our review before proceeding to our recommendations for individual institutions and for centers and laboratories as a whole.

Much has been learned about the conduct of educational research and development since the creation of the R&D centers and regional educational laboratories. We also know considerably more about the processes of diffusing knowledge and effecting change. The Panel's sense is that the experience of the last decade reaffirms the need for centers and has strengthened the rationale for laboratories. Also, there exists an improved basis for understanding how both types of institution should pursue their missions and which functions are most important.

The general case for cumulative, large-scale interdisciplinary research programs that originally led to research and development centers is as strong as ever. No one has devised ways in the intervening years for overcoming the limitations of project-by-project work. Of course, we now know that the relationship among research, development, and dissemination is neither linear nor unidirectional. But the need for institutions that focus primarily on research, performing development and dissemination when appropriate, is still compelling.

The need for educational improvement through R&D and technical assistance delivered by regionally based laboratories is even stronger than before. This becomes especially clear when reviewing the history of dissemination, as we do

in a later chapter. We now know, for example, of the need for practitioners, administrators, and policymakers to interact with institutions that can bring R&D to bear on mutually defined problems. Moreover, increased understanding of the political dimensions of educational change reinforces the argument for decentralized decisionmaking.[22] These considerations strengthen the rationale for the functions of regional education laboratories that are governed by and responsive to regional interests in collaboration with the sponsoring Federal agency.

On this basis and on the basis of our reviews of individual institutions, the Panel endorses the concept of R&D centers and regional educational laboratories and affirms the importance of maintaining and improving the stability and quality of the existing institutions.

We are aware that there is now a far greater variety of performers of educational R&D than existed when centers and laboratories were created. The depth and extent of that domain will be better understood when NIE completes a project now underway to identify all the performers of research, development, dissemination, and evaluation in the field of education.[23] That inventory of current resources could reveal that the R&D centers and regional educational laboratories are not the only form of institutional capacity suited to meeting the needs we cite. But we are confident that as institutional types they represent two excellent means for improving American education through R&D.

Coincidences in the funding and administration of centers and laboratories have tended to encourage grouping them together, as in the common phrase "lab and centers." This blurring of distinction is reinforced by an inevitable—and often desirable—overlap in activity that occurs in pursuit of their complementary purposes. Moreover, some existing institutions, as much from historical conditions as from their aspirations, have become hybrids of the two basic forms. The Panel is not worried about this development, nor should NIE be. But we do endorse the fundamental distinctions of purpose between the R&D centers and the regional laboratories.

In affirming the distinction between the centers and laboratories, we wish to be clear as to what those purposes are. This is especially important, given the history of debate about the role of laboratories, in particular. But that debate suggests that more than one concept of a center or laboratory is viable. Thus, we do not encourage rigidity either in defining the two institutional forms or in applying the ideal definitions to existing institutions.

We identify the various institutional functions that justify long-term support of individual laboratories and centers in Chapter III. Here, we shall merely state the basic differences in purpose.

R&D centers are designed to undertake the following (not listed in order of importance):

- conduct basic research in a priority substantive area on a large-scale, programmatic basis;
- exercise national leadership in that area;
- define specific problems and research strategies through advisory boards representing scholars and practitioners in the field;
- engage in development when appropriate; and
- disseminate their research findings and products.

Regional education laboratories, by contrast, are designed to:

- identify concerns and priorities through regionally representative governing and advisory structures and activities that help the regional clientele define their needs;
- conduct applied research and development in pursuit of those priorities;
- provide technical assistance to the region;
- facilitate communication among agencies and individuals;
- promote the use in the region of R&D results from all sources; and
- disseminate the results of their own R&D on a national basis.

The purpose of centers, then, is weighted toward basic research, with less emphasis on development and dissemination. Laboratories are oriented toward applied research derived primarily from regional problems, giving emphasis to development and dissemination. Nonetheless, as centers and laboratories move through cycles of problem identification, R&D, and dissemination, there will be an inevitable similarity in their activities. Centers, for example, might choose to exploit the relevance of their research findings for extended product development. Laboratories, in response to regional problems, might engage in exploratory activities that resemble basic research. Certain problems addressed by centers might be more relevant to one region than to others. Conversely, laboratories might direct some of their efforts nationally with the endorsement of their governing bodies. But the basic differences in purpose should be maintained.

With this background in mind we have reviewed the long-range plans of the 17 centers and laboratories and conducted site visits to each. In the chapters that follow we offer recommendations for the support of individual institutions and for strengthening and stabilizing the set of laboratories and centers as a whole. Our future activities will address our charge to make recommendations for the support of new laboratories and centers. In doing so we shall pay particular attention to the needs of those regions in the country that are without access to the research, development, and related activities provided by the existing laboratories.

Several of our recommendations have fiscal implications. In a few instances these can be accommodated by the reordering of priorities within laboratories and centers. Generally, however, we hope that Congress will affirm our confidence in the R&D centers and regional educational laboratories by providing the resources necessary to strengthen and stabilize them. Moreover, we reiterate our faith in the R&D system of which the centers and laboratories are a part and urge increased support for all educational R&D.

FOOTNOTES

1. A recent portrait of educational R&D that provides historical perspective and data on Federal support is contained in *1976 Databook—The Status of Education Research and Development in the United States* (Washington, D.C.: National Institute of Education, 1976), especially pp. 16-28. A useful earlier account is to be found in *Educational Research and Development in the United States* (Washington, D.C.: U.S. Government Printing Office, 1970).

2. Drawing on other sources, these data are cited by Lee Sproull, Stephen Weiner, and David Wolf in *Organizing an Anarchy: Belief, Bureaucracy, and Politics in the National Institute of Education* (Chicago: University of Chicago Press, 1978), p. 20.

3. Estimates of Federal support of R&D vary radically according to the definition used. For example, for 1974 the National Science Foundation (NSF)

estimates a Federal expenditure of $174.5 million, whereas the Office of the Management of the Budget gives a figure of $414.2 million! However, by using the same definition, one can make comparisons from year to year that are necessarily more accurate. According to NSF data, Federal obligations in FY 1969 were $154.8 million; the estimated figure for FY 1975 is $157.8 million, continuing a downward trend from a peak in FY 1972 of $190.7 million (*1976 Databook, op. cit.*, p. 21). Given this trend and given that the dollar has lost half its value in the last decade, it is reasonable to suppose that the current investment is now less than that in FY 1969.

4. The 1954 Brown v. Board of Education decision cited the psychological research of Kenneth Clark (347 U.S. 483).

5. *Fundamental Research and the Process of Education*, a Report to the National Institute of Education by the National Academy of Sciences (Washington, D.C.: National Institute of Education, 1977). This report illuminates the complex diffusion process of basic research findings and provides data on the flow of information from basic research journals to education research journals and practitioner-oriented educational magazines.

6 Patrick Suppes, ed., *Impact of Research on Education: Some Case Studies* (Washington, D.C.: National Academy of Education, 1978). These studies include areas such as the development of mental ability testing, the impact of Jean Piaget's work on educational practice, and school finance reform. Of special interest in the more general piece by J.W. Getzels, "Paradigm and Practice: On the Impact of Basic Research in Education," pp. 477-521.

7. The conference report on H.R. 15 cites the "high quality and extremely useful work accomplished by NIE in the ESEA Title I study." The legislation gives the Institute a number of new responsibilities, including mandated policy studies on community education, adult education, and school finance.

8. For a thorough discussion of this problem, see *R&D Funding Policies of the National Institute of Education*, Final Report of consultants to the Director and the National Council on Educational Research (Washington, D.C.: National Institute of Education, August 1975).

9. Citing a 1975 National Science Foundation report, the *1976 Databook (op. cit.*, p. 29 ff.) estimates that in 1973 77 percent of the $40 million that flowed through State departments of education in support of R&D came from Federal sources. Other estimates have shown the State and local contribution to be still smaller (*Educational Research and Development in the United States, op. cit.*, p. 117).

10. For a detailed treatment of the development of educational R&D, see Richard Dershimer, *The Federal Government and Educational R&D* (Lexington, Mass.: D.C. Heath and Co., 1976).

11. The establishment and early operation of the R&D centers is described and assessed in "USOE-Funded Research and Development Centers: An Assessment," *Journal of Research and Development in Education* 1:4 (Summer 1968). The entire volume is devoted to reports from nine centers with critical responses. See also the *1976 Databook, op. cit.*, pp. 40-43, and footnote 18 for further data on the centers.

12. The Gardner Task Force reported its findings in "Report of the President's Task Force on Education," June 14, 1965, Executive FG 600/Task Force File, Education, Box 1, Lyndon Baines Johnson Library, Austin, Texas.

13. For accounts of the origins and development of the laboratory program, see Chapter 6 in Dershimer, *op. cit.*, and Stephen K. Bailey, "Emergence of the Laboratory Program," *Journal of Research and Development in Education* 3:2 (Winter 1970): 5-18.

14. For histories of the principal agencies administering Federal educational R&D, including the centers and laboratories, see Dershimer, *op. cit.*, and Sproull *et al., op. cit.*

15. According to Panel member Hendrik Gideonse, a member of that task force, only a handful of the participants were allowed to read the Gardner report. Even then, they were allowed a single chance to examine copies made available under tight restrictions.

16. See "A Brief Chronology of the National Program of Educational Laboratories," mimeographed (Washington, D.C.: National Institute of Education, 1970). The chronology describes an assessment of

the laboratories contained in a position paper of the National Advisory Committee on Educational Laboratories, submitted July 1978. See also Francis Chase, *The National Program of Educational Laboratories: Report of a Study of Twenty Educational Laboratories and Nine University Research and Development Centers*, mimeographed (Washington, D.C.: December 1968). According to the chronology (p. 3), the position paper of the Committee notes that "the remarkable fact is that within the short period of two years, most of the laboratories have developed appropriate and viable structures and programmatic concentrations of extraordinary promise." Chase's review, which encompassed the centers as well as the laboratories, concluded (p. 6) that the 20 laboratories and 9 centers "constitute an important part of the national effort to bring the full power of science and technology into the service of education, even though the conditions attending the establishment and early operation of these twenty-nine organizations have not been uniformly conducive to effective operation."

17. The principal reviews that followed were: "Report to the President's Science Advisory Committee on Educational Research and Development in the U.S. Office of Education by the PSAC Task Group on Educational R&D," mimeographed (Washington, D.C.: December 1968); Francis Chase, "Educational Research and Development in the Sixties: The Mixed Report Card," paper submitted to the Select Subcommittee on Education, U.S. House of Representatives, mimeographed (Washington, D.C.: April 1971); the 1971-72 USOE/NIE review of all laboratory and center programs; J. Victor Baldridge and Rudolph Johnson, "The Impact of Educational R&D Centers and Laboratories: An Analysis of Effective Organizational Strategies" (Stanford, Calif.: National Academy of Education, May 1972); and "Educational Laboratory and Research and Development Centers Need to be Strengthened," a report to the Congress by the Comptroller General of the United States (Washington, D.C.: General Accounting Office, 1973).

18. See Dershimer, *op. cit.*, pp 95-101. Laboratory allocations were frozen at $23.6 million for FY 1979, $1 million more than for FY 1968. Continued hopes for allocations of over $150 million never materialized. Total USOE/NIE support through 1975 amounted to $203,254,000 *(1976 Databook, op. cit.*, p. 41). For subsequent history of the centers, see "A Brief Chronology of the Research and Development Center Program, mimeographed (Washington, D.C.: USOE, Division of Research and Development Resources, September 1970). By 1968 one center had converted itself into a laboratory and another continued to receive funding only on an individual project basis. A third center was discontinued in 1970. (A fourth received no significant NIE funding after 1974, but continues on other funding sources.) See the *1976 Databook, op. cit.*, p. 42, for funding profiles of the Cooperative Research Act Centers as well as other centers. Of the nine R&D centers receiving NIE funding that were reviewed by the Panel, seven were among those established by the Cooperative Research Act. The other two are the National Center for Higher Education Management Systems, governed by the Western Interstate Commission on Higher Education, and the National Center for Research on Vocational Education at Ohio State University.

19. For one view of the background of this policy, see "Educational Laboratories and R&D Centers and Their Relationship with the National Institute of Education" (Washington, D.C.: Council for Educational Development and Research, April 1975), p. 3 ff. Prior to the transfer of laboratories and centers to NIE, USOE planners laid the foundation for a policy that would shift funding from an institutional to a programmatic basis, with additional provisions for independent research support and a management fee. This policy, based on the theory that "mature" institutions no longer require "core support" for institutional functions, is articulated by Charles Frye in two papers: "DMI Institutional Support and Evaluation Policy," mimeographed (Washington, D.C.: USOE, National Center for Educational Research and Development, 1971); and "Management Policy for Institutional Support and Assessment," mimeographed (Washington, D.C.: USOE, National Center for Educational Research and Development, February 1972).

20. NIE adopted the philosophy of programmatic as opposed to institutional support as articulated by Frye (see previous footnote). However, although subsequent NIE funding provided the management fee envisioned by Frye, it contained no separate provision for independent R&D.

21. "Resolution of the National Council on Educational Research: Institutions Engaged in Education Research and Development," NCER Resolution

No. 091875-18, as amended July 23, 1976 (Washington, D.C.: National Institute of Education, 1976).

22. This point is substantiated in Sproull *et al.*, *op. cit.*, p. 219.

23. This project, conducted by the Bureau of Social Science Research on an NIE grant, is called "The American Registry of Research Organizations in Education."

II: Recommendations for the Support of Individual Laboratories and Centers

Our review has convinced us of the need for Federal support of each of the 17 existing institutions. More general recommendations on policies and procedures appear in the next chapter.

In both cases we have kept two general concerns in mind. Our legislative charge asked us to make "recommendations for the improvement and continuation of individual laboratories and centers," which oriented us more toward suggestions for stability and constructive strengthening than toward summary judgments. A similar perspective is encouraged by evidence that many of the shortcomings in laboratory and center performance are a result of patterns of Federal funding and policy. At the same time we note that Congress is also concerned that NIE be mindful of quality and relevance to the overall NIE program in entering into relationships with these institutions. This concern is reinforced by voices from the educational R&D community that question the rationale for special guarantees for support of a restricted set of institutions.

In an effort to accommodate both concerns we adopted the following perspective. In making recommendations for the support of existing laboratories and centers we are inclined to allow for a period of stability and clearly defined expectations. This should enable NIE and the laboratories and centers to move beyond the problems of the past and resolve the areas of institutional or programmatic weakness we have identified. In making recommendations on general policies and procedures, we aim to clarify questions of mutual responsibility, accountability, and quality to enable NIE to make future decisions to renew or withdraw from such relationships based on principles that are consistent with NIE's overall procedures, yet cognizant of the special properties of centers and laboratories.

The individual recommendations draw on our review of the institution's long-range plans and the site visit reports submitted by teams of Panel members. (See the Appendix for the Interim Report and the site visit reports, as well as a description of the Panel's process of operation). We formulate particular recommendations from an array of choices presented in NIE's March 1977, "Official Solicitation of Long-Range Plans from Labs and Centers," which we see as the fundamental policy statement for NIE and laboratory and center relationships. The options range from a "long-term institutional agreement" for up to 5 years to a "contract to phase out NIE support." Intermediate options of a contract for planning for a long-term institutional agreement, contracts for projects for up to three years, and contracts to plan for projects are also presented.

We recommend long-term institutional agreements for seven of the eight regional educational laboratories and for seven of the nine R&D centers. Our conception of such an agreement is outlined in the next section, but an essential feature is the commitment to support a set of institutional functions for 5 years, supplemented by a level of project support that enables the center or laboratory to function viably as an institution in pursuit of its mission. Without such project support there is no rationale for NIE to enter into the agreement.

For the remaining institutions, we recommend some combination of project support and continued planning and strengthening toward an

eventual long-term institutional agreement. In each of those cases we cite specific issues that require resolution before decisions on long-term commitments can be made. It is NIE's responsibility to work closely with the center or laboratory on planning and strengthening.

For all 17 institutions we supplement our recommendation with comments on areas of strength and weakness to which we direct the attention of NIE and the respective laboratory or center as they pursue their collaborative relationship.

CENTER FOR EDUCATIONAL POLICY AND MANAGEMENT (CEPM)

University of Oregon
Eugene, Oregon

The Interim Report of the Panel recognized the appropriateness of the study of educational policy and management as a focus for an R&D Center. However, we did not find the breadth of scope in CEPM plans that would support this mission. In addition, we had concerns about some of the projects and about the strength of advisory mechanisms and dissemination efforts.

Although our site team commented favorably on the Center's projects and reaffirmed its potential as a national resource on educational administration, the team felt, and the Panel agrees, that the Center has neither the scope of mission nor the staff to manifest this potential. Therefore, we recommend that NIE provide planning support and necessary collaborative strengthening to build and consolidate CEPM's role of leadership in this area. Moreover, we recommend that NIE consider long-term support for CEPM's projects as efforts to broaden the Center's scope are undertaken. Finally, to facilitate CEPM's general development, we urge attention to four areas: the role and composition of the National Advisory Group; a more systematic program of visiting scholars and practitioners; the continuing need for ethnic diversity in the Center's staff and students; and the possible need for more formal mechanisms of project management as the Center's activities increase.

CENTER FOR EDUCATIONAL RESEARCH AT STANFORD (CERAS)

Stanford University
Palo Alto, California

In our Interim Report we concluded that CERAS lacked the cohesive, substantive mission that is essential to an R&D center. However, our site visit team found that the Center has identi-

fied the problems of educational finance and governance as the focus for a new mission and has initiated a planning process that promises to give substance to this timely and significant area by capitalizing on the outstanding intellectual resources of Stanford and nearby institutions. We are impressed with the quality and direction of the emerging mission and will welcome the opportunity to review the 5-year plan of CERAS. Considering the close cooperative effort between NIE and CERAS during the planning period, there should be no question that the outcome of the current activity will merit the stability of a long-term institutional relationship.

As the new mission is developed and consolidated, we hope that CERAS will maintain its affirmative action efforts in the areas identified by the site visit team and will be sensitive to the need to gear the administrative structure to the new mission.

CENTER FOR SOCIAL ORGANIZATION OF SCHOOLS (CSOS)

The Johns Hopkins University
Baltimore, Maryland

The Panel reaffirms the recommendation of the Interim Report and of the site visit team that NIE enter into a long-term institutional agreement with CSOS. Although the Panel had raised questions in the Interim Report about the substantive coherence of the Center's work, the team was impressed with the significance and unity of CSOS projects and their potential for influencing educational theory and practice. The Panel's Interim Report query about "in-breeding" of staff was positively resolved by the site team's understanding of the career orientations of the staff, their origins in different disciplines and experience at other institutions, and the special recruitment efforts underway for new positions.

The Panel notes the strength of the cross-program staffing, staff interests, and the internal evaluation process at CSOS. We suggest that NIE collaborate with the CSOS staff to utilize their competence in desegregation studies. In general, the Panel endorses the collaborative efforts of NIE and CSOS to utilize the excellent and high quality research capacity of CSOS in addressing educational research priorities.

The Panel directs the attention of CSOS and NIE to two concerns: the need for the Center to better inform and involve constituencies that might be affected by its work, particularly State and local policy makers (CSOS's reactivation of a representative National Advisory Board should assist in this activity); and the need for greater attention to the dissemination of the Center's work. (In the case of product dissemination, we encourage CSOS to continue to develop cooperative efforts with regional education laboratories.)

CENTER FOR THE STUDY OF EVALUATION (CSE)

University of California
Los Angeles, California

The Panel reaffirms the recommendation of the Interim Report and of the site visit team that NIE enter into a long-term institutional agreement with CSE. In our Interim Report we did express concern about the mission and priorities of the Center, and in subsequent discussions serious questions have been raised about the quality of the staff and work. These questions were also raised by the reviews of an earlier external panel. However, our site team is satisfied that CSE has formulated a new and promising mission, that the staff is generally able, and that CSE merits a long-term relationship. Therefore, we accept the site team's findings.

Nonetheless, we cannot state too strongly our concern for the consequences of less than superior work in evaluation and assessment. Given the importance of this area, and given the above reservations about the staff and technical quality of CSE's products, we urge NIE and CSE to place top priority on developing a process of ongoing review to provide continual assurance of the quality of the Center's work.

Finally, the Panel commends the Center for its extensive employment of women but remains concerned about the lack of minorities on the staff.

LEARNING RESEARCH AND DEVELOPMENT CENTER (LRDC)

University of Pittsburgh
Pittsburgh, Pennsylvania

The Panel reaffirms the recommendation of the Interim Report and of the site visit team that NIE enter into a long-term institutional agreement with LRDC. The site visit team reported that LRDC can already point to results in the recruitment of minority senior staff and that the LRDC staff is, in fact, in close touch with colleagues doing related work at other institutions. However, we reiterate our concern that LRDC broaden the disciplinary expertise of its staff beyond psychology to include such fields as sociology and anthropology and that mechanisms be developed to regularly involve practitioners and consumers into LRDC's setting of priorities.

Generally, the Panel shares the enthusiasm of the site team, which viewed LRDC as a Center committed to a coherent and significant mission, enjoying an exemplary relationship with its home university, and maintaining a staff of both high quality and morale.

NATIONAL CENTER FOR HIGHER EDUCATION MANAGEMENT SYSTEMS (NCHEMS)

Boulder, Colorado

The Panel reaffirms the recommendation of the Interim Report and of the site visit team that NIE enter into a long-term institutional agreement with NCHEMS. In so doing, we merely affirm the wisdom of a policy that NIE has, in fact, already initiated through the establishment of the current 3-year contract with NCHEMS. The Panel regards this arrangement as exemplary, at least as originally conceived, and recommends it as a model for relationships with other labs and centers. We note, however, that this relationship has not provided NCHEMS with the fiscal security we believe the Center merits. We hope that such security will characterize any future agreement.

NCHEMS distinguishes itself from other labs and centers through its concentration on post-secondary problems. The Panel believes that this unique mission must be considered by NIE in arriving at funding decisions and in evaluating the hybrid character of NCHEMS in relation to the original conceptions of R&D centers and regional educational laboratories.

Our site visit team reinforced two concerns mentioned in our Interim Report. We see a general need for attention to the adaption and impact of NCHEMS' products. In some cases this means greater effort to design products for particular audiences, such as smaller, less sophisticated institutions. More generally, it means considerable attention to training and dissemination. We are disturbed, therefore, at the declining proportion of NIE funds supporting these activities. Since this decline appears, in part, to be an incidental consequence of NCHEMS' program assignment within NIE, we urge the Institute to review this problem. Our other concern, clearly shared by the management of NCHEMS, is for a more equitable composition of its Board and staff.

NATIONAL CENTER FOR RESEARCH IN VOCATIONAL EDUCATION (NCRVE)

Ohio State University
Columbus, Ohio

The Panel reaffirms the recommendation of the Interim Report and of the site visit team that NIE enter into a long-term institutional agreement with NCRVE. The role of the Center as the U.S. Office of Education National Center for Research in Vocational Education and an NIE Research and Development Center for Vocational Education gives it a unique identity

and potential. Although we urge continued attention to the compatibility of these two roles and to the implications of the fact that only a small portion of the Center's support comes from NIE, we are convinced of the Center's capacity to coordinate the work being done for multiple funding sources.

As expressed in the Interim and site reports, the Panel hopes that the Center will pay particular attention in the future to the relevance of its research for minority and youth unemployment and that it will conduct a longitudinal evaluation to strengthen the knowledge base on career and vocational education. In these and other areas, it will be important for the Center to collaborate with other labs and centers and other agencies on issues related to education and work.

The Panel underscores the importance of the coordination of dissemination programs at the State level and suggests that increased funding of the "Dissemination and Articulation Project" might be necessary to accomplish this. We are impressed with the Center's ability to deliver services to requesting agencies and individuals and believe that increased funding for this role should be provided.

We also see the need for funding of an internal evaluation of the Center. The Panel further urges the Center to continue its noteworthy efforts toward affirmative action in the appointment of new personnel. Finally, we hope that the new institutional monitor will resolve past problems in NIE monitoring of the Center and that the Center will be consulted in the formation of any additional project advisory councils.

RESEARCH AND DEVELOPMENT CENTER FOR TEACHER EDUCATION (RDCTE)

University of Texas
Austin, Texas

The Panel reaffirms the recommendation of the Interim Report and of the site visit team that NIE enter into a long-term institutional agreement with RDCTE. The site visit clarified most of the questions that had been raised by the Panel in its review of RDCTE's plans. However, the Panel is quite concerned that, although the Center appears to be highly regarded by the University of Texas, it receives virtually no financial support from that institution. We hope that the university will acknowledge the benefits that accrue to it from a long-term relationship between NIE and RDCTE by increasing its financial support of the Center. We urge NIE to bargain for such support if necessary.

The Panel is concerned as well about the lack of minority staff members at the Center and urges RDCTE to find some means of addressing this problem, despite the hindrance posed by a scarcity of new positions.

Finally, we are impressed with the need for funding of development and dissemination efforts that will carry the Center's work into

schools. To the extent that NIE's policy on curriculum development—or perceptions of this policy—has inhibited such activity, we urge NIE to modify or clarify the policy appropriately.

WISCONSIN RESEARCH AND DEVELOPMENT CENTER FOR INDIVIDUALIZED SCHOOLING (WRDCIS)

University of Wisconsin
Madison, Wisconsin

The Panel reaffirms the recommendation of the Interim Report that NIE enter into a long-term institutional agreement with WRDCIS. In the Interim Report the Panel urged attention to program coherence and mission at the Center, lest it become a "collection of projects." This concern was not alleviated by our site visit team, which found that the former focus of the Center's work—Individually Guided Education (IGE)—has become so broadly construed as to imply no particular focus. Moreover, the Center seemed to our team to be embarking on an emphasis on basic research that does not capitalize on the strength of the present staff. Correspondence subsequent to the site visit has assured the team that the Center is aware of these problems. Although the Panel has concluded that these problems can be resolved in the context of a long-term relationship, we strongly urge NIE and WRDCIS to begin working together immediately to integrate more coherently the planned work and the abilities of the staff.

While WRDCIS works with NIE to strengthen its direction, we also suggest that it increase the participation of classroom teachers' representatives in Center planning and increase the representation of minorities on the staff.

APPALACHIA EDUCATIONAL LABORATORY (AEL)

Charleston, West Virginia

The Panel reaffirms the recommendation of the Interim Report and of the site visit team that NIE enter into a long-term institutional agreement with AEL. Various Panel concerns about the quality and clarity of specific programs were resolved by the site team, which reported substantial Lab impact on the educational policies and practices of AEL's 7-State region. We encourage the Lab to seek supplementary sources of funding and thereby increase its level of activity and fiscal security. However, we encourage the Lab to be mindful of the need for program cohesiveness, given the diversity of needs among member States. We are pleased that AEL is moving to increase teacher representation on its Board, but we remain concerned

about the lack of women and especially minorities on the Board and senior staff. The Panel urges AEL to review the scope and criteria of recruitment efforts.

CEMREL, INC.

St. Louis, Missouri

The Panel reaffirms the recommendation of the Interim Report and of the site visit team that NIE enter into a long-term institutional agreement with CEMREL. Responding to the concern in our Interim Report that CEMREL appeared a "hybrid" between a lab and a center and lacked a sense of identity, the site report has clarified the historical context of CEMREL's present mission and illuminated its advantages. We believe that CEMREL has a good chance of combining research that is useful on a national scale with regional service. It should not be deterred from doing so by a rigid view of a laboratory's role.

The site team also clarified Panel questions about the role of the *Mehr Licht* Group and about procedures for needs sensing. We urge CEMREL to extend its affirmative action efforts to the managerial staff level and recommend a reassessment of the effectiveness in job placement of the Women and Minorities Training Program. We are impressed with CEMREL's prior use of a "visiting committee" for substantive review of its programs. As this mechanism is revived, we hope that it will be used to represent regional interests as well as subject matter expertise. The Panel recommends such a committee to NIE and other labs and centers as a model for accountability.

FAR WEST LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT (FWL)

San Francisco, California

The Panel reaffirms the recommendation of the Interim Report and of the site visit team that NIE enter into a long-term institutional agreement with FWL. We found FWL to be a strong institution, vigorously seeking support for the development of quality products and the provision of useful information and services. The institutional relationship with NIE will be most fruitful, we believe, if NIE and FWL attend to the several concerns expressed in the site visit report. For example, our team confirmed the need for a Board of Directors that is more repre-

sentative of the region's population and clientele, while recognizing the diffuse responsibility for correcting this problem. We encourage FWL's attention to the clarity of criteria for identifying new projects and the efficacy of new procedures for coordinating projected initiatives congruent with governance-sanctioned missions and for assessing the impact of the multiplicity of projects underway. In establishing priorities, we recommend that the Lab rely more on systematic communication with client groups to ascertain needs and less on available funding opportunities. Both the Lab and NIE must address the implications of the fact that less than half of FWL's funding comes from NIE. The Panel commends the Lab for its emphasis on research methods that allow practitioner participation, although we hope that its experimentation with innovative research methodologies will be tempered with caution.

MID-CONTINENT REGIONAL EDUCATIONAL LABORATORY (McREL)

Kansas City, Missouri

In the Interim Report we recommended that McREL be granted planning support to renew and extend its role as a regional Lab. We note with pleasure the finding of our site team that the Lab is proceeding in an orderly and thoughtful manner to develop a 5-year plan. The quality of the McREL staff and of the planning effort thus far give the Panel every reason to foresee an eventual long-term relationship with NIE. The Panel would welcome the opportunity to review those plans when they are completed.

As McREL furthers its planning efforts, we encourage the Lab to attend to the issues of coordination with its new Denver office and to allocate its limited resources carefully throughout the expanded region of service.

NORTHWEST REGIONAL EDUCATIONAL LABORATORY (NWREL)

Portland, Oregon

The Panel reaffirms the recommendation of the Interim Report and of the site visit team that NIE enter into a long-term institutional agreement with NWREL. The site visit report reassured the Panel of the significance of the large number of programs at NWREL and the capacity of the Lab to manage them. Moreover, we are impressed with the Lab's procedures for assessing regional needs.

We take note, however, of the site visit team's reservations about several components of the

Multicultural Education Division. We encourage a conceptualization of the multicultural program that includes a broad base of diverse racial and cultural emphases, particularly as it bears on bilingual education and the design and impact of the inservice education program for the Washington Education Agency. We also see the need for more minorities and women in executive positions at the Lab and the need for minority and appropriate practitioner representation on the Board.

Generally, the Panel urges the Lab to continue to develop its already extensive coordination and communication efforts with educational entities in its region, especially for developing programs. The Panel hopes NWREL will pay particular attention to ties with institutions that educate and certify teachers.

RESEARCH FOR BETTER SCHOOLS (RBS)

Philadelphia, Pennsylvania

The Panel reaffirms the recommendation of the Interim Report and of the site visit team that NIE enter into a long-term institutional agreement with RBS. Our Interim Report expressed reservations about the mission and capability of the Lab, but the site visit team has substantially resolved our concerns.

The Panel welcomes the recent shift in emphasis in RBS plans from what appeared to be basic research to a clear focus on the use of research and development for school improvement. Both RBS and NIE are to be congratulated for the evident effort that has gone into strengthening the Lab's plans. We believe, however, that aspects of particular programs and their overall integration can be strengthened and refer the Lab and NIE to our site visit report.

We found RBS to have strong ties to constituents in its region and are confident that useful work will result from these linkages, particularly if they are maintained at all governance levels within the States. We do recommend that NIE and RBS consider extending membership in the RBS region to Maryland. Finally, we were pleased to see the degree of women and minority representation on RBS' staff and Board and hope that its senior staff will soon reflect those characteristics as well.

SOUTHWEST EDUCATIONAL DEVELOPMENT LABORATORY (SEDL)

Austin, Texas

The Panel reaffirms the recommendation of the Interim Report and of the site visit team that NIE enter into a long-term institutional agreement with SEDL. The site visit has resolved

most of the questions raised by the Panel in its Interim Report. The team found, for example, that SEDL's projects are in fact consistent with its mission and NIE priorities. Responsiveness to regional needs accounts for the diversity of topics. However, we recommend attention to the grouping and assignment of projects, particularly those classified under "other research."

Among other findings, the team noted that SEDL is communicating well with the staff of related programs at other labs and centers, except in the case of one project. Also, since our January report SEDL has clearly made efforts to increase minority and women Board representation. The project on "Cognitive Styles of Language Minority Children" was clarified for the site team, although we feel that it is weakened by the location of part of the staff in a distant city. We think that the project on "Ways to Improve Education in Desegregated Schools" could be strengthened by identifying criteria for the success of school desegregation strategies and conducting further research within and outside the SEDL region.

The Panel wishes to commend SEDL for its ability to identify critical issues before they are widely recognized and for its superior staffing procedures. In particular SEDL seems to us a model lab in the way that it has overcome affirmative action recruiting problems. However, there is a need at SEDL, as at other labs and centers, to establish job placement assistance for its Women and Minority Training Program.

SEDL's initial efforts in dissemination, which appear quite successful, raise a significant policy question. The Lab would like to conduct developmental activity where appropriate but feels restrained by the NIE policy on curriculum development. It is not clear to the Panel that the NIE policy does, in fact, preclude the work SEDL would like to undertake, particularly in light of the Lab's concern with equalizing educational opportunity (which provides exceptional justification for curriculum development under the NIE guidelines). But we find that the perception that NIE will not support development is widely held, which in itself inhibits such activity. We encourage NIE to clarify this issue among its own staff and with SEDL (as well as other labs and centers). The Panel hopes that it is resolved in ways that allow SEDL to translate its efforts into processes and products directly applicable to schools.

SOUTHWEST REGIONAL LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT (SWRL)

Los Alamitos, California

The Panel reaffirms the recommendation of the Interim Report and of the site visit team that NIE enter into a long-term institutional agreement with SWRL. As that relationship takes shape we hope that NIE and SWRL will collaborate to address the concerns raised in our review of SWRL's plans and in the site visit report.

We remain concerned, for example, about the coherence of SWRL's mission and see a need for

a sharper sense of the Lab's program direction. As that mission is clarified, we think it is important that SWRL tie its activities more closely to the needs and priorities of the three States that it serves. NIE might need to facilitate the strengthening of SWRL's relations with the Chief State School Officers in those States. We are convinced that SWRL does, in fact, provide extensive service to its region, but we see little recognition of this in the form of State and local financial support of the Lab. We urge SWRL to solicit such support as it directs its programs toward State priorities.

Finally, we hope that SWRL will increase its attention to the dissemination and technical assistance that are required for the Lab's products to have full impact, and we encourage the Lab to communicate more systematically with other labs and centers doing related work. The Panel commends SWRL for the considerable progress it has recently made in hiring minority and women staff members.

III: Recommendations on the Management of NIE's Relationship with the Laboratories and Centers

The Panel sees reason to believe that strong and mutually supportive relationships will emerge between NIE and the centers and laboratories. The negotiation and management of those relationships will mark a critical transition in the Federal sponsorship of educational R&D. By shifting from a "program purchase" to an "institutional" form of support, NIE is adopting policies that will nurture and capitalize on the unique strengths of laboratories and centers.

The improved policies can be attributed to two factors. One is the responsiveness of the new NIE leadership to the concerns of the laboratories and centers. The procedures for long-term relationships have emerged through dialog and collaboration with the Panel, CEDaR, and the staff of individual institutions, among other constituents. The second is the NCER Resolution that established the policy foundation for "institutional" relationships. However, there are other NCER policies—such as those on curriculum development and fundamental research—that have a bearing on the missions of laboratories and centers.[1] Therefore, it is essential to the strength of NIE's relationship with laboratories and centers that NCER be an active participant in the dialog with laboratories and centers and enlarge its understanding of those institutions.

In recommending long-term institutional agreements for most of the existing laboratories and centers, the Panel foresees a period of stability during which NIE will collaborate with each institution to strengthen it and develop procedures geared to its unique mission. Simultaneously we intend to lay the ground rules for relationships that clarify the roles and responsibilities of the participants. Thus, we are concerned here not only with NIE's initial negotiation of these agreements with centers and laboratories, but with the conditions under which they might or might not be renewed.

While there has been some experience with the support of research and development in other fields and there are a number of lessons to be learned from the history of educational research and development to date, we anticipate that many of the details of the management of these relationships will have to be worked out through experience. Certainly the details must differ between laboratories and centers and among the institutions within each type. Nevertheless, our reviews, visits, and discussions have given us a good sense of the issues requiring attention. Our intent here is as much to suggest guidelines, and to raise questions that still need to be answered, as it is to make specific recommendations.

There are four key areas: (1) the nature and duration of NIE's financial commitment to the institutions; (2) the means of assuring accountability and quality; (3) the ways in which laboratory and center priorities are determined and the institutions' participation in the setting of NIE priorities; and (4) the linking of centers and laboratories to NIE through monitors and the coordinating office.

PROVIDING INSTITUTIONAL STABILITY

Particular functions of the regional educational laboratories and the R&D centers require and justify the stability of long-term support. Such duties are institutional, as contrasted to programmatic, in character. As a foundation for our discussion, we shall first illustrate them.[2]

For research and development centers, institutional functions include:

- a periodic review of the state of knowledge in a center's field, involving knowledge synthesis and the identification and clarification of problems;
- the exercise of leadership in its field, holding conferences and stimulating and sponsoring work elsewhere when appropriate;
- maintenance of strong and broadly representative advisory mechanisms;
- collaborative planning with other R&D performers and NIE staff;
- assistance to NIE through pursuit of mutually defined short-term activities;
- institutional development through visiting scholar programs and staff development activity;
- sponsorship of training and fellowship programs (such as the Women and Minorities in R&D projects); and
- institutional self-evaluation.

For regional educational laboratories, institutional functions include:

- needs assessment and the identification and clarification of problems in the laboratory's region;
- provision of R&D-based services to practitioners in the laboratory's region, stimulating or sponsoring R&D by other performers when appropriate;
- maintenance of strong and broadly representative constituent governance and advisory structures;
- exploratory R&D to develop approaches to solving the region's educational problems;
- dissemination (defined broadly to include activities that enhance the impact of the laboratory's and others' R&D);
- collaborative planning with other R&D performers and NIE staff;
- assistance to NIE through pursuit of mutually defined short-term activities;
- institutional development through visiting scholar programs and staff development activity;
- sponsorship of training programs (such as the Women and Minorities in R&D projects); and
- institutional self-evaluation.

The listed functions require that both centers and laboratories be treated as *institutions* in the form of their support. This point emerged strongly in the Panel's work. From our review of the history of laboratories and centers, our reviews of long-range plans, and from our site visits it became clear that the program purchase policy has had serious, debilitating effects. Institutional missions have eroded in response to the necessity of addressing large numbers of specific problems and to the need to seek additional sources of support. Also, the governing and advisory mechanisms that are so essential to providing coherence and direction have atrophied for lack of support.

To its credit, the new NIE leadership shows increasing awareness of this problem. The Institute has recently affirmed a policy of funding built on the recognition that centers and laboratories must be treated as institutions.[3] Thus, we anticipate implementation of the policy established for NIE by NCER in July 1976.

There are other important dimensions to institutional stability. They are best understood through discussion of the general procedures for implementing the "long-term institutional agreements" that we recommend for most of the existing laboratories and centers. We deliberately

choose the term "long-term institutional agreement" because it is used in NIE's March 1977 "Official Solicitation of Long-Range Plans from Labs and Centers," which is recognized by NIE, the centers, and the laboratories as their procedural constitution. However, the document does not spell out the implications of such an agreement, except to say that it "will commit the Institute to inviting new projects and program plans from the labs and centers as other work is completed during the term of the agreement."[4]

In a September 18, 1978, paper, CEDaR suggested that such an agreement entail support for a set of "institutional functions," which would differ fundamentally between laboratories and centers and would be defined to allow for individual differences among institutions.[5] Support for projects would be considered—and funded—separately.

The distinction between institutional and project activity is important. However, as both NIE and CEDaR have agreed in discussion, one cannot separate the two functions for purposes of determining institutional capability. Thus, a decision to enter into or renew a long-term agreement should take into account project quality, as well as more general institutional capability. By the same token, NIE's support of institutional functioning makes no sense without a concurrent commitment to some level of project support. Therefore, such agreements should imply a commitment to a level of project support that enables the lab or center to function viably as an institution in support of its mission. NIE must have the flexibility to define what this means through interaction with individual institutions. We have confidence in the Institute's disposition to recognize and capitalize on the institutional strengths of each laboratory and center and provide the support necessary for their vitality.

The 1977 solicitation suggests that an agreement last for up to 5 years. We see that upper limit—5 years—as an appropriate duration for both laboratories and centers. We endorse the NIE suggestion that each institution be subject to an intensive external review of its projects and institutional functions during the 3d year of the commitment. If the review's outcome is favorable, the agreement should be renewed for an additional 5 years from that date. The consequences of negative review are treated in the next section, Ensuring Accountability and Quality.

We leave the choice of which particular contractual instrument to use to the judgment of NIE and the needs of individual laboratories and centers. Likewise, the decision to combine or separate institutional and project functions is one which we leave to be worked out by the Institute in its continuing conversation with the institutions. However, we are concerned that two additional dimensions of stability be captured by whatever mechanisms are employed.

First, it is important that the institutions have some capacity to anticipate future funding levels. We recommend that a general level of effort be negotiated for both institutional and project functions in the 1st year. This would serve as an overall planning commitment for subsequent years (subject to adjustments for inflation or in the unfortunate event of declines in the NIE appropriation). The institutional functions should represent a more stable and consistent portion of the budget, with the amount of the project component varying more from year to year. The establishment of a planning figure would help the centers and laboratories choose realistically, and with a sense of priority, among their many options. As particularly important—and costly—additional opportunities

come up, the center or laboratory should be free to seek additional funding from NIE on the merits of the project.

Our second concern pertains to the management fee that originally accompanied laboratory contracts. Recently NIE has used grants, which contain no fee, for laboratory and center funding. During our site visits, laboratory managers stressed the importance of having a small fund with which to purchase equipment, retain staff between projects, and maintain the viability of the institution. This capability is essential for effective functioning, particularly for free-standing institutions such as the regional laboratories. We urge that, whatever instrument is chosen for providing basic allocations to the laboratories, it should be capable of meeting this need.

Recommendation 1

NIE procedures for the support of the research and development centers and regional educational laboratories should encourage stability and enhance the institutional character of their missions and functions:

a. the basis for support should be a long-term institutional agreement;

b. the agreement should last for 5 years, renewable for the same period after the 3d year upon favorable review;

c. the agreement should commit NIE to a level of institutional and project support that allows the center or laboratory to function viably in pursuit of its mission.

Recommendation 2

Funding instruments for regional educational laboratories should contain a management fee or features that resolve the problems resulting from the lack of such a fee.

A problematic dimension of NIE support has to do with other sources of laboratory and center funding. As seen in Tables A and B, individual centers and laboratories differ greatly in the degree of support they receive from NIE, ranging from 15.5 percent to 95:1 percent in FY 1979. No simple guidelines exist for NIE support of institutions receiving a large share of their support from other sources. In such cases the Institute clearly does not bear the same degree of responsibility for the institution's viability. Similarly, we recognize the potential need

TABLE A

ANALYSIS OF NIE SHARE OF CENTER FUNDING BY FISCAL YEAR

($ in thousands)

	1973	1974	1975	1976	1977	1978	1979*
Center for Educational Policy and Management							
Total Expenditure	$ –	$ 1,377	$ 1,677	$ 1,511	$ 1,495	$ 1,645	$ 1,444
NIE Expenditure	–	839	1,139	932	707	760	613
NIE's Percentage of Total	–	60.9	67.9	61.7	47.3	46.2	42.5
Center for Educational Research at Stanford							
Total Expenditure	504	1,619	1,590	2,220	1,568	904	1,081
NIE Expenditure	351	1,076	945	1,188	736	904	981
NIE's Percentage of Total	69.6	66.5	59.4	53.5	46.9	100	90.7
Center for the Social Organization of Schools							
Total Expenditure	496	553	525	419	986	1,014	1,202
NIE Expenditure	480	534	501	367	852	897	1,097
NIE's Percentage of Total	96.8	96.6	95.4	87.6	86.4	88.5	91.3
Center for the Study of Evaluation							
Total Expenditure	–	2,154	1,194	1,049	1,280	1,161	1,365
NIE Expenditure	–	1,835	868	738	1,080	996	1,025
NIE's Percentage of Total	–	85.2	72.7	70.4	84.4	85.8	75.1
Learning Research and Development Center							
Total Expenditure	3,414	3,056	3,261	2,945	2,673	3,231	3,304
NIE Expenditure	2,100	2,528	2,602	2,234	1,958	2,481	2,519
NIE's Percentage of Total	61.5	82.7	79.8	75.9	73.3	76.8	76.2
National Center for Higher Education Management Systems							
Total Expenditure	1,948	1,918	1,565	2,114	2,637	2,269	2,376
NIE Expenditure	1,027	1,643	1,507	1,534	1,610	1,400	1,507
NIE's Percentage of Total	52.7	85.7	96.3	72.6	61.1	61.7	63.4
National Center for Research in Vocational Education							
Total Expenditure	6,481	2,861	3,278	2,954	3,044	5,468	8,214
NIE Expenditure	6,172	2,585	1,335	1,556	1,085	1,300	1,275
NIE's Percentage of Total	95.2	90.4	40.7	52.7	35.6	23.8	15.5
Research and Development Center for Teacher Education							
Total Expenditure	–	786	902	766	1,351	1,580	1,577
NIE Expenditure	–	684	850	274	1,292	861	1,500
NIE's Percentage of Total	–	87.0	94.2	35.8	95.6	54.5	95.1
Wisconsin Research and Development Center for Individualized Schooling							
Total Expenditure	2,314	3,191	3,399	2,808	2,546	2,325	2,528
NIE Expenditure	2,057	2,756	2,666	1,980	1,925	2,023	2,225
NIE's Percentage of Total	88.9	86.4	78.4	70.5	75.6	87.0	88
Total Expenditure	15,157	17,515	17,391	16,786	17,580	10,597	23,091
NIE Expenditures	12,187	14,480	12,413	10,803	11,245	11,622	12,742
NIE's Percentage of Total	80.4	82.7	71.4	64.4	64.0	59.3	55.2

*Figures for FY 1979 are estimated; all other fiscal years give actual amounts.

Source: Educational Organizations and Institutions Staff of the National Institute of Education.

TABLE B

ANALYSIS OF NIE SHARE OF LABORATORY FUNDING BY FISCAL YEAR

($ in thousands)

	1973	1974	1975	1976	1977	1978	1979*
Appalachia Educational Laboratory							
Total Expenditure	$ 2,284	$ 2,076	$ 2,703	$ 1,780	$ 901	$ 1,342	$ 1,606
NIE Expenditure	1,682	1,861	1,930	1,515	672	1,208	1,365
NIE's Percentage of Total	73.6	89.6	71.4	85.1	74.6	90	85
CEMREL, Inc.							
Total Expenditure	3,238	3,026	2,875	3,203	2,907	3,500	3,500
NIE Expenditure	2,943	2,501	2,116	2,120	2,462	1,684	2,808
NIE's Percentage of Total	90.9	82.7	73.6	66.2	84.7	48.1	80.2
Far West Laboratory for Educational Research and Development							
Total Expenditure	4,981	5,059	5,799	6,292	6,349	8,100	8,500
NIE Expenditure	1,388	3,366	3,003	2,731	2,844	3,157	2,692
NIE's Percentage of Total	27.9	66.5	51.8	43.4	44.8	39	31.7
Mid-Continent Regional Educational Laboratory							
Total Expenditure	1,158	662	178	196	198	531	449
NIE Expenditure	985	202	22	16		250	250
NIE's Percentage of Total	85.1	30.5	12.4	8.2		47.1	55.7
Northwest Regional Educational Laboratory							
Total Expenditure	5,100	6,172	6,129	5,414	5,311	7,106	7,200
NIE Expenditure	3,432	4,241	3,909	3,682	2,959	3,197	3,165
NIE's Percentage of Total	67.3	68.7	63.8	68	55.7	45	44
Research for Better Schools							
Total Expenditure	–	5,098	4,650	4,020	3,958	4,081	4,081
NIE Expenditure	–	4,362	3,880	2,913	2,931	2,557	2,558
NIE's Percentage of Total	–	85.6	83.4	72.5	74.1	62.7	62.7
Southwest Educational Development Laboratory							
Total Expenditure	2,085	3,358	3,246	4,246	3,920	3,500	3,000
NIE Expenditure	1,991	1,802	1,836	1,923	1,739	1,607	1,465
NIE's Percentage of Total	95.5	53.7	56.6	45.3	44.4	45.9	48.8
Southwest Regional Laboratory for Educational Research and Development							
Total Expenditure	2,827	2,954	3,058	2,563	3,226	2,773	2,800
NIE Expenditure	2,724	2,694	2,735	1,890	1,727	1,895	1,903
NIE's Percentage of Total	96.4	91.2	89.4	73.7	53.5	68.3	68
Total Expenditures	21,673	28,405	28,638	27,714	26,770	30,933	31,136
NIE Expenditures	15,145	21,029	19,431	16,790	15,334	15,555	16,206
NIE's Percentage of Total	69.9	74	67.9	60.6	57.3	50.3	52

*Figures for FY 1979 are estimated; all other fiscal years give actual amounts.
Source: Educational Organizations and Institutions Staff of the National Institute of Education.

for special governance and management procedures for the NIE share of an institution's funding in those instances.

We suggest two principles to govern the optimal balance between NIE and other support. First, in considering other sources of funds, a center or laboratory should select activities on the basis of their relevance to the institution's mission. Given the unstable nature of Federal support in recent years, it is not surprising that some laboratories, in particular, have tended to become "job shops" to buttress their survival. However, the stability that we envision from long-term institutional agreements should alleviate the need for such dispersed entrepreneurial activity. Legally, a center or laboratory is free to respond to any available funding opportunity. But in such cases its claim for the special stability of long-term support is weakened in proportion to the share of activities it conducts not related to the NIE-supported mission. A second principle, relevant primarily to laboratories, is that institutions should seek support for activities that *are* related to their mission. Laboratories can provide more services to their regions and can be more certain that those services are valued when State and local agencies help pay for them.

Recommendation 3

NIE should discourage centers and laboratories from undertaking activities not closely related to their central missions.

Recommendation 4

NIE should encourage laboratories to seek support from their regions for activities closely related to their missions.

Finally, although we believe it important that centers and labs maintain the capacity to sense and address the priorities appropriate to their missions, we do not think it necessary in all cases for that capacity to be developed or maintained by the institution itself. Laboratories should subcontract to obtain services or resources that would be expensive or difficult to build into the institution indefinitely (e.g., expertise for the development of a specialized test). Centers might be allowed to provide regular support for promising research projects outside the center as a means of advancing its mission.

Recommendation 5

NIE should encourage laboratories and centers to subcontract or decentralize their functions when to do so serves the stability of the institution or the pursuit of its mission.

ENSURING ACCOUNTABILITY AND QUALITY

The Panel shaped its recommendations with the conviction that institutional stability is a necessary but not sufficient condition for an effective set of centers and laboratories. The NCER anticipated this view in its resolution of May 20, 1977, which stated that in the charge to the Panel "the [NIE] Director should convey the Council's concern that 'quality' be weighed at least as heavily as all other considerations (including institutional stability) in evaluating plans submitted by the labs and centers."[6]

The instability occasioned by past USOE and NIE policies and by fluctuations in Federal appropriations reinforces our commitment to the congressionally mandated principle of "improvement and continuation." However, we share the Council's concern for quality. It is important now to think through procedures for ensuring quality and to clarify the issues of how and by whom responsibility should be taken for the long-run success of laboratory and center efforts. Such procedures are essential to the definition of a long-term institutional agreement.

NIE must take an active role in building and consolidating the strength of centers and laboratories. Past Federal policies have not always been helpful in this regard. Therefore, NIE should take an unusual responsibility for strengthening in the first 3 years of the initial long-term institutional agreements. (In our site visit reports we note instances in which this has already happened.) But more fundamentally, NIE's responsibility is determined by the special character of the institutional relationships we propose. The lack of knowledge about how best to manage those relationships suggests that NIE should view them as a collaborative experiment.

We realize that this poses a dilemma. Where does NIE responsibility end? Certainly we do not mean that failure could not at some point be declared. But once an institutional commitment has been made, it should not end without a major effort by both parties to make it work. At the same time, the stability afforded by long-term institutional relationships should, in the near future, relieve NIE of any special obligation to the centers and laboratories owing to the consequences of its past policies. By the time of the 3d-year review, the criteria for evaluating laboratory and center performance should derive only from considerations of significance and technical quality, defined in recognition of the institutional character of the efforts.

Although we encourage collaborative and collegial relationships between NIE and the laboratories and centers, it is clear that formal mechanisms of accountability must be employed. We view strong and representative governance and advisory structures as the mainstays for ensuring that centers and laboratories perform their roles adequately. External peer reviews serve as a further check on the adequacy of these processes.

Effective governing and advisory boards play the dual role of providing an important measure of accountability while shaping institutional priorities. For laboratories, governing boards and advisory bodies should reflect broad representation of the region's educational interests. It is especially important that there be strong ties with State, intermediate, and local agencies and that laboratories seek designated representatives from parent and teacher organizations. We underscore as well the need for adequate female and minority representation.

There is more than one way to shape such structures. We saw instances where labs directly achieve regional representation on their boards. In other cases, boards were composed of individuals not formally representative of the region, but a visiting committee more directly represented relevant interests. We understand that it is sometimes difficult to maintain the active participation of Chief State School Officers, for example. Therefore, it is important to experiment with other mechanisms for ensuring that such interests are represented when determining the priorities and assessing the work of the laboratories.

We note considerable variety in the strength of laboratories' ties to their regions. Where such ties are weak, we urge NIE to see that they are strengthened. In general, NIE has the responsibility to work with a laboratory's governing structure to ensure that a process is in place that effectively represents the region's interests and clients and guarantees that the recipients and potential recipients of a laboratory's services participate in the evaluatior of their relevance and quality.

Center advisory boards should have representation of the leading scholars and include consumers of scholarship in the particular field addressed. NIE should oversee such representation to ensure that such a group has a real impact on the research and leadership activities of centers. The critical point is to involve a substantial number of the leading figures in the field, wherever their institutional base, in the direction of the center's work. It should be remembered, however, that a center's formal governing responsibility rests with its host university.[7] It will not be easy to give sufficient authority to an outside advisory group; and we do not yet have a clear model for an effective solution to that problem. It is a matter that will require some delicate experimentation on the part of NIE and the several universities and centers.

Although an appropriate governing and advisory structure is necessary for ensuring that priorities are appropriately set and that institutions are held accountable for responding to them, it is often not sufficient. External and peer reviews are useful techniques for obtaining additional judgments of, and pressure for, quality and accountability.[8] Such reviews should be established by NIE with the participation of the center or laboratory. For the most part their orientation should be toward giving constructive advice on ways of improving the institution and its projects. The external review conducted by NIE in April 1978 is a good example of how this can work. Certainly for laboratories, but to some degree for centers as well, the conception of "peer" needs to extend beyond scholarly colleagues to include representatives of practitioner and other user interests. It should also include persons outside education with experience in institutional management and evaluation.

The crucial reviews will come about 3 years into the commitment. We recommend that this be a thorough external review of the institutional functions, projects, and general capability. It is essential, given the reliance we suggest on governing and advisory structures, that these mechanisms be subjected to thorough scrutiny as well. Such reviews present the appropriate opportunity to reassess the priority of the areas in which a center works. In that case the review should involve the broadest possible range of leading scholars in education, appropriately balanced by practitioners. If a center's area is determined to no longer be of top priority, the NIE institutional agreement should not be

renewed, although project support might be continued.

The 3d-year review of laboratories should entail the broadest possible involvement of the region's educational interests. We assume that there is a continuing need in each region for the services provided by laboratories (a need that is not yet met in all regions). Thus, the review will not question the necessity of providing services of that kind. Instead it should focus on the responsiveness of the laboratory and its governing structure to regional needs. The institutional agreement with laboratories should lapse only in the face of persistent evidence that the laboratory is not meeting and cannot be strengthened to meet the region's needs.

If the 3d-year review of a laboratory or center is negative, the existing agreement allows 2 years for planning and strengthening. It is important for NIE to play a collaborative and facilitative role under such a circumstance. But if NIE makes a good faith effort to strengthen the institution and if a review during the 5th year is still negative, it is then appropriate that NIE not renew the institutional agreement. In such a case a contract to phase out project support might be an appropriate transition from the special agreement to a relationship in which the institution is free to compete on the same terms as any other performer for NIE funds.

Although the Panel expects NIE to acknowledge the experimental nature of its relationships with centers and laboratories and to make every effort to help them succeed, we also expect the Institute to apply rigorous quality standards to these performers, as to any others. Those standards must explicitly recognize the *institutional* as well as the programmatic functions of the centers and laboratories. The 3d-year review will be the primary opportunity for holding them accountable to those standards.

Recommendation 6

NIE should actively ensure that governing and advisory bodies of centers and laboratories are strong and are representative of the institutions' clienteles, including representation through recognized teacher and parent organizations.

Recommendation 7

NIE should conduct external reviews, involving appropriate peers and practitioners, to supplement the accountability provided by governing and advisory structures.

Recommendation 8

NIE should periodically reassess the priority areas addressed by centers and phase out the institutional agreement when the area no longer warrants special priority.

Recommendation 9

In the 3d year of a long-term institutional agreement, NIE should conduct a rigorous onsite review involving external peers to assess the quality of institutional and programmatic functions.

a. upon a negative review, 2 years for collaborative strengthening with NIE should be allowed;
b. upon a second negative review, the NIE institutional agreement should not be renewed.

SETTING PRIORITIES

Center and Laboratory Priorities

One consequence of the program purchase policy was to emphasize Federal priorities in the formulation of laboratory and center goals. To be sure, the priorities of centers and laboratories are intended by Congress to be responsive to NIE's priorities. Moreover, Congress itself establishes the fundamental mission of the Institute and has endowed the NCER with further policy-making authority. Nonetheless, through appropriate governance and advisory procedures laboratories and centers can arrive at programmatic priorities that are consistent with NIE goals, yet responsive to regional and national interests. We feel strongly that, in the transition to institutional relationships, the locus of priority-setting responsibility should shift toward the laboratories and centers.

In the case of the laboratories the emphasis on regional concerns makes it clear that the primary source of priorities should lie in the needs of the region's schools. In turn, these needs should be expressed through a governance structure broadly representative of the region's educational interests, including representatives of organized parents and teachers. NIE should ensure that the governing and advisory structures do provide effective representation of interests in the regions. In principle, this process should pose no problem for NIE, for its basic goals are stated very generally. A laboratory's interpretation of regional interests, if derived from a thorough and representative process, could be viewed by NIE as the concrete realization of the more abstract priorities. In this manner, the labs will directly aid NIE in addressing one of its two overriding goals: the improvement of practice.

For centers different procedures are necessary. Clearly the initiative for the support of a center should grow out of the priorities and needs of an NIE program, in interaction with the scholarly community in that field. But once the need for a center in a particular field has been identified and an appropriate institution has been chosen, NIE's emphasis should be on ensuring that the chosen institution maintains an advisory group effectively representing the interests of that field. The research strategies and programs for addressing those priorities and the leadership functions would then be determined by the advisory group and by the center director and his or her colleagues. NIE staff, presumably having a background and standing in that field,

should play a more active though not dominant role in advising and collaborating with the center on the interpretation of its mission. The basic mission of a center should be reassessed only as part of the 3d-year review of the institutional agreement and should otherwise be free from changing Federal priorities.

As with accountability, the governing and advisory structures are the key mechanisms for ensuring that the most appropriate national or regional priorities are established. NIE's role, although more active with the centers, focuses primarily on ensuring that those mechanisms are strong and representative and, therefore, likely to result in appropriate, defensible decisions. However, we reiterate our conviction that, in exchange for the stability of long-term institutional agreements, centers and laboratories should refrain from activities not closely related to their missions (see Recommendation 3).

Recommendation 10

Laboratories, through strong and representative governance structures and utilization of needs-sensing activities, should be the primary agents in setting their priorities.

Recommendation 11

Centers, through consultation with scholarly and practitioner interests in their respective fields and in collaboration with NIE staff, should be the primary agents in establishing strategies and programs in pursuit of the mission initially determined by NIE.

NIE should take a more active role in accomplishing two purposes complementary to priority setting. First, we noted in our review of plans and site visits that communication among laboratory and center staff, even those working in the same area, is more serendipitous than systematic. Although it is clearly the responsibility of such staff to take the initiative for communication with their colleagues both within laboratories and centers and elsewhere in the R&D system, NIE should not leave this to chance. The responsibility for this appropriately rests with the NIE office that coordinates labs and centers. It is also the ultimate responsibility of that office to control for unnecessary duplication of effort in programs, especially at the laboratories. We recognize, of course, that some areas should be addressed in every lab; but not all overlap is warranted.

Recommendation 12

The NIE office coordinating centers and laboratories should encourage more systematic communication among those institutions to assure integration of their activities and prevent unnecessary duplication of effort.

NIE Priorities

The setting of NIE priorities has special implications for laboratories and centers. Certainly, those institutions deserve a special role in that process. We recognize that NIE's basic goals are established by Congress, but these goals are broad and require specificity. In making those goals concrete we see the need for a more systematic and participatory process of setting NIE priorities.

We have already argued that, especially in the case of laboratories but also for centers, NIE should accept the institutional priorities that emerge from the interaction of these institutions with their constituencies. This principle has a corollary, which is that NIE should utilize the capacity of centers and laboratories to identify needs and problems in the setting of its own priorities. NIE does not itself have a 5-year plan of the kind that is required of laboratories and centers. In the absence of such a plan, it is all the more desirable that NIE involve the staff of those institutions where appropriate in the setting of its own priorities.

Recommendation 13

NIE should develop a more systematic and participative process of setting its priorities, one which builds actively on the capacity of centers and laboratories to identify needs and problems.

The Curriculum Development Policy

One of NIE's policies established by NCER has resulted in priorities that are of some particular concern to the Panel. In our site visits we often encountered the perception that NIE had decided to refrain from support of any form of curriculum development. This was a frequent source of frustration for the labs in particular, many of which have developed a special capacity for producing curriculums in response to local and national needs. We inquired into that policy, which was established by NCER after an extensive process of national survey, dialog, and analysis by NIE staff. Ironically, the concern that led to the policy grew out of the recommendation of an earlier survey of laboratory and

center policy—the Campbell Report—that NIE assess the value of curriculum development as a strategy for aiding schools.[9] It is not evident to the Panel that the policy does, in fact, prohibit curriculum development to the extent that it is perceived to do so. The policy defines NIE's role in curriculum development to be primarily catalytic. It requires increasing justification for NIE support of development as the activity moves from applied research through prototypic development to full-scale implementation. We understand the rationale for this policy, given NIE's limited resources and the political dangers involved. We note as well that the policy allows exceptions for special needs, in particular the effort to equalize educational opportunity.

Nonetheless, it is our experience that laboratory and center staff members regard the policy as prohibitive, not simply restrictive. This perception might have been communicated to them by NIE staff, for we have encountered a similar view among program monitors. The Panel is concerned about this, for we believe there might be a continuing need for limited and occasionally full-scale development. We recognize that there might be other sponsors for development work (e.g., State and intermediate agencies) and other providers besides laboratories or centers (e.g., private publishers or nonprofit R&D organizations). But the linkages between needs and providers are often loose, and the incentives to produce and market materials are not always strong. Thus, NIE could well be the only sponsor for many needs.

We cannot claim to have made a systematic inquiry into the curricular needs of the Nation, and we recognize that there is a natural tendency for laboratories and centers to keep doing what they have been doing. Nonetheless, our own experiences as educators persuade us of the need for more development than seems to be taking place under the current NIE policy. We would not foreclose the opportunity for at least some laboratories and centers to do full-scale development, even in a specialized area or areas. Experience has shown the need to maintain close contact between the development process and the ultimate users of the products. If the institutions keep that in mind, there can be a firm value in large-scale efforts. Moreover, the governance structure of laboratories will provide a political base for the support of curriculum development that was sometimes lacking in earlier efforts.

Recommendation 14

NIE should ensure that the curriculum development policy is understood by the field and NIE staff, should monitor the implementation of the policy, and, if necessary, should modify the policy to allow needed development activity.

MONITORING

The firmest evidence that NIE now regards the laboratories and centers as institutions rather than as collections of projects is the new policy of "institutional monitoring." In response to recommendations in the Panel's Interim Report, the Institute created in early 1978 a system of

monitoring giving one individual overall responsibility for liaison between a laboratory or center and NIE and for coordination of the monitoring of discrete projects. This role has had notable impact in repairing the serious consequences of the program purchase policy, which had resulted in the fragmented monitoring of up to 16 programs from one institution by 11 monitors scattered throughout NIE. We commend NIE for this policy and recommend that it be continued. However, the role of institutional monitor still requires strengthening and redefinition to provide NIE and centers and laboratories with the necessary ties.

The Panel also commends NIE for the establishment of the Educational Organizations and Institutions Staff in the Director's office. This unit, which coordinates the work of the institutional monitors and manages the implementation of laboratory and center policy generally, is widely regarded as an effective channel for communication of laboratory and center concerns. However, its effectiveness can be enhanced by strengthening certain functions.

Centers and laboratories have a need for integrated monitoring of all their projects. We have the impression that, although institutional monitors coordinate communications between NIE and the institutions, they have done little to alter the conception of monitoring at the program level. Individual program monitors rarely, if ever, communicate with one another and, therefore, seldom see their project in the context of all the institution's work. We recognize that NIE staff members have heavy responsibilities, but it is important that they approach the task of project monitoring in a fashion that reflects the new commitment to laboratories and centers as institutional entities. The incentives for doing so might be small, particularly if a program monitor only has one project with a center or lab. But we urge the institutional monitors and especially the office responsible for laboratories and centers to address this issue.

Another common need is for consistency in the standards and requirements imposed by institutional monitors on centers and laboratories. The institutional monitors are key arbiters of NIE policy and have considerable power in the administration of accountability. Differences in personal style and judgment can have substantial consequence for funding decisions. This will be particularly true in the upcoming period of negotiations for long-term institutional agreements. The relatively weak accountability of institutional monitors to the coordinating office gives us special cause for concern. We urge attention to this issue as well.

An additional problem common to laboratories and centers is the considerable turnover in both institutional and program monitors. This inevitably causes disruption and confusion for the institution. We realize that some degree of turnover is unavoidable, but we urge NIE to take steps to minimize that disruption and its consequences. At a minimum, NIE should improve the keeping of written histories of project records and institutional relationships.

The assignment of institutional monitors based in substantive NIE divisions has caused problems of a different sort. These programmatic assignments are leftover from the program purchase period. To the extent that the interests of the monitor are narrower than those of the institution, this can have a constraining, if often unintended, effect on center or laboratory priorities. Since laboratories are likely to address a broad range of subject areas, including technical assistance and dissemination, this problem

is particularly acute for them. However, even when the substantive interests of the monitors and institutions coincide, the monitors might be inclined—in the absence of other incentives or checks—to encourage the institution in the direction of his or her own personal interests.

Any resolution of this problem must take into account the unusual skills and time demands required for institutional monitoring. Center monitors should be firmly grounded in the particular subject areas of the centers' missions and should have well-developed skills and interest in fundamental research. Moreover, they ought to have some interest in and talent for dealing with institutional questions. Laboratory monitors, by contrast, profit from having a broader range of substantive interests and a good deal of understanding of dissemination and approaches to educational improvement. Lab monitors should be familiar with the political structures of education at all levels and should be comfortable communicating with the various participants in that system. Laboratory monitoring might also require more time than the monitoring of centers. But the active and multifaceted role that we advocate for both institutions is not easily shared with other major responsibilities. Ideally, the job should be full-time, although a monitor might be able to handle more than one institution. Despite differences in emphasis between the requirements for center and laboratory monitoring, individual institutions have distinctive characteristics, which will require specifically qualified personnel.

These problems are complex and concern internal organizational and staffing questions within NIE. We call them to the attention of the Institute without prescribing specific solutions. However, we wish to convey our strong conviction that the monitoring of laboratories and centers is a major task of considerable sensitivity, which should be the primary duty of the institutional monitor. We encourage NIE to take whatever steps are most effective in responding to the problems that we have identified by proposing the following:

Recommendation 15

The NIE policy of institutional monitoring should be continued and strengthened through:

a. assigning institutional monitors as a full-time or primary responsibility; and

b. assuring access and accountability of the institutional monitors individually and collectively to the Office of the Director of NIE.

FOOTNOTES

1. The NCER policy on "NIE's Role in Instructional Program Improvement" and its foundations are described in *Educational Research: Limits and Opportunities*, Third Annual Report of the National Council on Educational Research (Washington, D.C.: National Institute of Education, March 1977), Chapter 3. The policy on "Fundamental Research Relevant to Education" is articulated in *Reflections and Recom-*

mendations, Fourth Annual Report of the National Council on Educational Research (Washington, D.C.: National Institute of Education, 1978), Chapter 5.

2. This listing of institutional functions draws heavily on "Special Institutional Agreements: New Relationships between NIE and the Laboratories and Centers" (Washington, D.C.: Council for Educational Development and Research, September 1978).

3. See "NIE Procedures for Determining Long-Term Relationships with Existing Labs and Centers," draft, mimeographed, August 1978; and "Analysis of Reactions to NIE's Draft Procedures for Determining Long-Term Support for Existing Laboratories and Centers," mimeographed, October 1978.

4. "Official Solicitation of Long-Range Plans from Labs and Centers" (Washington, D.C.: National Institute of Education, March 25, 1977), p. 4.

5. "Special Institutional Agreements," *op. cit.*

6. "Minutes of the May 20, 1977, meeting of the National Council on Educational Research" (Washington, D.C.: July 1977), p. 15. The recommendation was 1 of 14 contained in a report of the Review and Reports Committee of NCER on the implementation of "Resolution of the National Council of Educational Research: Institutions Engaged in Education Research and Development," NCER Resolution No. 091875-18, as amended July 23, 1976 (Washington D.C.: National Institute of Education, 1976).

7. Centers are typically university based, but this should not be an absolute requirement. NIE currently supports one R&D center – NCHEMS – which has a different governance structure.

8. The use of peer reviews is not a new notion. Title IV of the Elementary and Secondary Education Act, which amended the Cooperative Research Act, required as a condition for funding of R&D centers a review by peers. However, we define "peers" to include educational practitioners and persons with expertise in institutional management.

9. *R&D Funding Policies of the National Institute of Education*. Final Report of consultants to the Director and NCER (Washington, D.C.: National Institute of Education, August 1975), p. 73. For the policy on curriculum development, see *Educational Research: Limits and Opportunities, op. cit.*, Chapter 3.

IV: The Special Importance of Dissemination and Equality of Educational Opportunity

We find two issues worthy of special attention. Time constraints, however, have limited our scope of work on the issues of dissemination and equality of educational opportunity. Preliminary recommendations are included here in both cases, but we intend to devote further attention to each in our activity beyond January 1979.

DISSEMINATION

Our reviews of long-range plans of the centers and laboratories and our site visits have heightened our awareness of the need for systematic efforts to ensure that the results of their work be utilized. We also saw the need for laboratory and center staff members to keep abreast of the work conducted by their colleagues within and beyond the institutions. Finally, we became sensitive to the need for integration of laboratory and center dissemination efforts with the many dissemination programs in existence.

Awareness of the need for dissemination is widespread, and noteworthy efforts are underway. We found some exemplary activities at labs, although centers tend to rely too heavily on the traditional academic modes of dissemination. Efforts at both kinds of institution seem modest in scale. NIE has made substantial effort in recent years to enhance the dissemination capabilities of laboratories and centers and the R&D system generally, although individual staff members are sometimes disposed to favor "substantive" work over dissemination when monitoring programs. Generally NIE should allow laboratories and centers to devote a larger share of their resources to dissemination when it suits their missions and should provide increased funding when necessary. Moreover, we see too little attention to forms of dissemination that are firmly linked to the improvement of practice, and too little integration among the efforts that exist. Neither NIE nor the centers and laboratories are in a position to address this problem directly nationwide, but we see opportunities for improvement within their sphere of influence.

The Evolving Concept of Dissemination

Federal interest in the dissemination of promising educational practices and ideas has grown steadily over the past 20 years. From initial efforts to build and make available a knowledge base on education, governmental intervention in this sphere of activity has increased to the point of widespread involvement in a variety of projects designed to bring to bear research findings on the improvement of educational practice.

Paralleling this growth, though perhaps causally unrelated, is a corresponding growth in the Government's understanding of what a commitment to the goal of educational improvement through the dissemination and utilization of information fully entails. When Federal support of educational research was in its earliest phase, during the late 1950's and early 1960's, the common conception of dissemination was simplistic and traceable to the etymology of the word itself. To disseminate originally meant to sow or broadcast, as seed; to spread abroad. Consequently, the process of dissemination as it applies to schools was first seen as requiring little more than some kind of a broadcasting

medium through which the good word, in the form of new products and ideas, might be passed.

However, over the years this idea has been gradually transformed. Today the emerging view of the total process is sufficiently broad to challenge the appropriateness of our continued use of the word itself. Contemporary redefinitions of dissemination recognize this. For example, the definition of the HEW Dissemination Analysis Group (DAG) has four components: spread, exchange, choice, and implementation.

This evolution has occurred in stages, even though not recognizable at the time. In fact the stages overlap in sequence. The 'sowing of seeds' stage had at least two parts: the first led to ERIC (Educational Resources Information Center); the second to syntheses of the information disseminated. On the heels of this period came the recognition that the flow of information between R&D agencies and the schools should be in both directions rather than one. Initially this meant that practitioners should be allowed and encouraged to inform developers of their likes or dislikes concerning the new products—a kind of consumers' report. Before long, however, the idea of a two-way exchange was enlarged to include the notion that practitioners should have a voice not only as consumers of what was already accomplished but also as planners of what was yet to come. These features are seen, for example in USOE and NIE demonstration and outreach programs, such as the Pilot States Dissemination Program and the State Dissemination Grants Program. To provide a shorthand for this enlarged definition of dissemination, a new vocabulary—including such terms as "needs sensing" and "feedforward"—was invented. It quickly became familiar bureaucratic jargon.

But as experience with the process of dissemination increased, even the idea of a two-way exchange initiated by the practitioners themselves did not seem to ensure that educationally sound ideas and materials were created and put to use. There was, for example, the growing recognition that neither the staffs of Government agencies nor those of the expanding network of R&D institutions could possibly speak directly to more than a handful of classroom teachers and building administrators. Consequently, it became necessary to work through State departments and intermediate agencies to reach the large mass of educational practitioners. Moreover, in many parts of the country, such agencies either did not exist or had not defined their role in a way that would serve the goals of dissemination. Hence "State capacity-building" programs evolved.

Recent dissemination activities have been expanded to include help in making educational decisions when confronted by what systems specialists sometimes refer to as "an information overload." The problem confronted by many educational practitioners, from classroom teachers to State superintendents, is not a paucity of ideas or a shortage of attractive alternatives, but exactly the opposite: a glut of goods. These individuals do not need *more* information. Instead, they need help choosing among what is available. This requires synthesis and interpretation, and it implies quality control and product evaluation. Thus, we see more duties added to the growing list of things the "*professional* disseminator" is expected to perform.

Two important activities are joining all that currently falls under dissemination. The first has to do with the implementation of good ideas or promising practices once they have been selected as desirable by practitioners. Teachers and school administrators too often give up rather

than stay with a project that requires technical assistance in its developmental phase, or one that seems to receive little encouragement from the administrative powers. This suggests the need for human support systems to provide technical assistance and staff training and retaining in the effective use of information and materials.

The second activity has to do with the idea of communication among peers. The conversation among researchers, developers, teachers, superintendents, and legislators is now seen as part of the dissemination process. Thus, when NIE gives money to a center or laboratory to create an "invisible college" of people studying the same problem, it is, under this expanded definition, supporting a dissemination effort.

Ironically, as the concept of dissemination expands, some of the informal mechanisms that facilitate it are contracting, creating the need for increasingly formal approaches. For example, the expansion of educational institutions and professions in the 1960's led to the diffusion of skills and ideas through educational personnel as they were trained in graduate schools of education and then took jobs in the field. Mobility within the system further facilitated a "natural dissemination." In today's climate of retrenchment, staff composition is more static, and the influx of newly educated professionals is abating.

The Dissemination Activities of Laboratories and Centers

By what means should centers and laboratories engage in dissemination? How have they affected and been affected by this broadening of the notion of dissemination? Prior to 1976 advocacy of their own products was the mainspring of center and laboratory dissemination efforts. In that year, NIE created the Research and Development Exchange (RDx) in an attempt to coordinate and strengthen center and laboratory dissemination of their own collective efforts as well as those of other R&D performers. Essentially, laboratories and centers were to become "brokers" of all existing R&D. Such coordination and cooperation seems to the Panel an especially significant step, not only because it attempts to orchestrate the work of the centers and laboratories but also because it recognizes their part in the larger R&D system.

However, the RDx program has not fully developed the laboratories and centers to serve as dissemination agents for one another's products, or for those of the larger R&D system. Furthermore, we encountered a lack of familiarity on the part of some staff members with related work underway elsewhere. We have already encouraged the NIE office that coordinates centers and laboratories to facilitate communication among these institutions. As the RDx matures it might take on the additional task of facilitating communication among the laboratories and centers as well as with their client groups.

One conclusion is certain: NIE cannot reduce to a formula its handling of dissemination as it affects the laboratories and centers. If we have learned anything from our site visits and reading of the 5-year plans, it is that each institution is unique. That uniqueness is nowhere more evident than in how each intends to handle the broadened topic of dissemination. Some labs, for example, are full-time dissemination agencies for the regions they serve. Others combine dissemination activities, such as needs sensing, with product development and self-generated research. Some centers seem to go through periods during which they pay relatively little

attention to dissemination (e.g., while engaged in basic research), only to be followed by periods when such attention is great (e.g., while engaged in product development). Moreover, even when the pattern of activity is similar between two or more laboratories or centers, the timing of those activities is not. Thus, it is difficult to adopt a uniform policy to fit one institution as well as another.

Are there any general policies, then, that would enhance the impact of the work of the centers and laboratories? We suggest several, relating both to NIE's role in dissemination generally and to issues specific to centers and laboratories.

As we have already stressed, there is the question of whether it is wise to continue using the term "dissemination" to refer to all the functions and activities with which it has become associated. The newer dimensions have been recognized by contemporary definitions. NIE has taken the noteworthy step of renaming its Dissemination and Resources Group "Dissemination and the Improvement of Practice." But there is a limit to what the etymologically limitted term can bear. Moreover, the issue is more than semantic. The task ahead is greater than speaking with precision. It requires, in the final analysis, the boldest thought of which educators are capable as we seek the best ways to enhance the quality of our schools.

The Panel is impressed with the extent to which labs, in particular, have the capacity to play a vital role in the interactive and participative aspects of dissemination. The regional needs-sensing function that we see at the core of laboratory missions is well suited to the two-way communication and planning essential to the new concept of dissemination. Moreover, the consultation, technical assistance, and training that are often provided by laboratories is an important dimension to the human support systems, which are now also seen as a part of dissemination. For laboratories to play these roles well, it is essential that they are formally linked to their regions through strong and active governance structures. Thus, our earlier recommendation on the role and composition of laboratory boards should serve this purpose as well.

However, it is clear that there are limits to the direct assistance that laboratories can provide to their constituents. The capacity for dissemination—including the human support systems of consultation, technical assistance, and training—must continue to be developed in each State.

Recommendation 16

As NIE continues to strengthen the R&D network through State capacity-building efforts and programs such as the Research and Development Exchange, it should encourage and support laboratory efforts to assist each State in the region served to establish effective dissemination procedures.

In reviewing the web of dissemination activities and networks of the past decade, we are struck by the need for coordination. The laboratories and centers can do little to correct cur-

rent flaws. There are limits as well to what NIE can do, for although the Institute has been designated as the lead agency in dissemination, it has responsibility for only a few of the many programs. However, laboratories and centers can and should coordinate their efforts with existing dissemination networks, including organizations of parents and professional educators. NIE can facilitate this process, while working to strengthen relationships with dissemination activities in the U.S. Office of Education.

Recommendation 17

NIE should facilitate laboratory and center efforts to coordinate their dissemination work with existing networks while working with other elements of the HEW Education Division to establish greater coordination among all Federal dissemination programs.

Finally, although NIE has made significant contributions to the theory and practice of dissemination, there remains room for improvement in the Institute's dissemination policies and practices. The Institute has developed a number of discrete programs that enhance dissemination capacity and knowledge about dissemination. However, these programs are not guided by a comprehensive policy on dissemination. NIE also has procedures for disseminating final reports, products, and other outcomes from the R&D it sponsors; but these procedures, too, lack the support of an overall Institute policy on dissemination. Moreover, they are not regularly enforced.

Recommendation 18

To enhance its impact and serve as a model for the education community, NIE should develop a comprehensive policy on its role in dissemination, should conduct programs that are consistent with that policy, and should implement effective procedures for the dissemination of the results of the R&D it supports.

EQUALITY OF EDUCATIONAL OPPORTUNITY

A persistent concern of the Panel has been the role of laboratories and centers in contributing to equality of educational opportunity. We have approached this issue from three perspectives: the relevance to equity of the substantive R&D conducted by centers and laboratories; efforts at those institutions to educate women and minorities for careers in educational R&D; and equitable representation of women and minorities on

the staffs and governing and advisory bodies of laboratories and centers.

We are convinced that laboratories and centers can and should play a major role in substantive R&D on equality of educational opportunity. These include areas such as the development of theory and practice that incorporate culture, socio-economic class, ethnicity, and language as important factors in learning; heightening the awareness and sensitivity of practitioners to the problems of institutionalizing equal educational opportunity; providing technical assistance to educational agencies involved in institutionalizing those opportunities; and systematic R&D on issues such as multiculturalism, bilingualism, and sexual stereotyping.

In our reviews of institutional plans and in our site visits we took note of a variety of programs devoted to such issues as sex role stereotyping, multicultural and bilingual issues, and desegregation. Moreover, we have seen R&D that, although not designed explicitly for special groups, has the potential to improve the education of minorities (e.g., individualized instruction). Laboratories and centers are making significant efforts to address substantive equity problems. However, in relation to the mammoth task of creating equal educational opportunity, laboratories and centers as a whole are not yet powerful agents in the development and provision of equity-related knowledge and services. We see a need for efforts that are larger in scale and more systematic, and we see a need for increased awareness and demonstration of the relevance of other R&D to equity.

Recommendation 19

In implementing its policy on improving equal educational opportunity, NIE should encourage increased attention of centers and laboratories to substantive equity problems in their research, development, and dissemination activities and increased awareness of the implications for equity of all their R&D.

Another strategy for improving equal educational opportunity is to increase the numbers of women and minorities pursuing careers in educational R&D. We are impressed with the existence of intern programs for this purpose at many laboratories and centers. But these programs need strengthening if they are to alleviate the shortage of qualified women and minority R&D personnel in the near future.

In our site visit reports we make a number of specific suggestions for improving these programs. Generally, we see a need for: (1) linking intern programs to their target audiences; (2) designing research training programs with input from advocacy groups for women and minorities; (3) introducing greater flexibility as to type and length of training; (4) aiming at career awareness as well as career training; and (5) de-

veloping effective career ladder programs. To facilitate these improvements, NIE should broaden program guidelines to allow flexibility and provide increased funding where necessary.

Recommendation 20

NIE and the centers and laboratories should strengthen the effort to educate women and minorities for careers in educational R&D.

We have paid particular attention to the representation of women and minorities on the staffs of laboratories and centers and on their governing and advisory bodies. This is more than an affirmative action concern per se, for the composition of staff, management, and advisers will heavily influence the content of the R&D conducted by centers and laboratories.

Our findings give cause for considerable concern. Despite a few exemplary efforts, we found significant underrepresentation of both women and minorities on the professional staffs of laboratories and centers, as well as on governing and advisory boards. This problem is particularly acute at the higher levels of management and leadership. Our experience suggests that centers and laboratories are at least as attentive to equity concerns as other R&D institutions. However, the laboratories and centers are seeking a special funding relationship with NIE. Such a relationship should entail increased responsibility for equity concerns.

We reported this in our January review of long-range plans and were delighted to find in our site visits that many institutions have taken significant steps to remedy this problem. Even where results were not yet visible, we found a heightened awareness of the situation. Nonetheless, much remains to be done. We are reassured by the fact that equal educational opportunity is one of two overarching priorities of NIE, and we are impressed here by the affirmative action record of the new NIE management. However, only the most persistent and forceful attention will solve this problem.

Recommendation 21

Consistent with affirmative action plans and equal employment regulations, NIE should continue to move aggressively to encourage equitable representation of women and minorities on the staffs and governing and advisory bodies of centers and laboratories.

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Appendixes

Appendix A: The Nature of the Panel

THE LEGISLATION AUTHORIZING NIE AND THE PANEL

Sec. 405 of the General Education Provisions Act, 20 U.S. Code 1221e, (PL 92-318)

As amended by PL 93-380 and PL 94-482

An Act

"NATIONAL INSTITUTE OF EDUCATION

"SEC. 405. (a) (1) The Congress hereby declares it to be the policy of the United States to provide to every person an equal opportunity to receive an education of high quality regardless of his race, color, religion, sex, national origin, or social class. Although the American educational system has pursued this objective, it has not yet attained that objective. Inequalities of opportunity to receive high quality education remain pronounced. To achieve quality will require far more dependable knowledge about the processes of learning and education than now exists or can be expected from present research and experimentation in this field. While the direction of the education system remains primarily the responsibility of State and local governments, the Federal Government has a clear responsibility to provide leadership in the conduct and support of scientific inquiry into the educational process.

"(2) The Congress further declares it to be the policy of the United States to—

"(i) help to solve or to alleviate the problems of, and promote the reform and renewal of American education;

"(ii) advance the practice of education, as an art, science, and profession;

"(iii) strengthen the scientific and technological foundations of education; and

"(iv) build an effective educational research and development system.

Establishment.

"(b) (1) In order to carry out the policy set forth in subsection (a), there is established the National Institute of Education (hereinafter referred to as the 'Institute') which shall consist of a National Council on Educational Research (referred to in this section as the 'Council') and a Director of the Institute (hereinafter referred to as the 'Director'). The Institute shall have only such authority as may be vested therein by this section.

"(2) The Institute shall, in accordance with the provisions of this section, seek to improve education in the United States through concentrating the resources of the Institute on the following priority

research and development needs—

"(A) improvement in student achievement in the basic educational skills, including reading and mathematics;

"(B) overcoming problems of finance, productivity, and management in educational institutions;

"(C) improving the ability of schools to meet their responsibilities to provide equal educational opportunities for students of limited English-speaking ability, women, and students who are socially, economically, or educationally disadvantaged;

"(D) preparation of youths and adults for entering and progressing in careers; and

"(E) improved dissemination of the results of, and knowledge gained from, educational research and development, including assistance to educational agencies and institutions in the application of such results and knowledge.".

Members.

"(c)(1) The Council shall consist of fifteen members appointed by the President, by and with the advice and consent of the Senate, the Director, and such other ex officio members who are officers of the United States as the President may designate. A majority of the members of the Council (excluding ex officio members) shall constitute a quorum. The Chairman of the Council shall be designated from among its appointed members by the President. Ex officio members shall not have a vote on the Council. The members of the Council shall be appointed so that the Council shall be broadly representative of the general public; of the education professions, including practitioners and researchers; and of the various fields of education, including preschool, elementary and secondary, postsecondary, continuing, vocational, special, and compensatory education.".

"(2) The term of office of the members of the Council (other than ex officio members) shall be three years, except that (A) the members first taking office shall serve as designated by the President, five for terms of three years, five for terms of two years, and five for terms of one year, (B) any member appointed to fill a vacancy shall serve for the remainder of the term for which his predecessor was appointed and (C) the term of office of each member shall expire on September 30 of the year in which such term would otherwise expire, unless a successor to such member has not been appointed and confirmed by the Senate by such date, in which case such member shall continue to serve until a successor has been appointed and confirmed".

Any appointed member who has been a member of the Council for six consecutive years shall thereafter be ineligible for appointment to the Council during the two-year period following the expiration of such sixth year.

"(3) The Council shall—

"(A) establish general policies for, and review the conduct of, the Institute;

"(B) advise the Assistant Secretary and the Director of the Institute on development of programs to be carried out by the Institute;

"(C) present to the Assistant Secretary and the Director such

recommendations as it may deem appropriate for the strengthening of educational research, the improvement of methods of collecting and disseminating the findings of educational research and of insuring the implementation of educational renewal and reform based upon the findings of educational research;

"(D) conduct such studies as may be necessary to fulfill its functions under this section;

"(E) prepare an annual report to the Assistant Secretary on the current status and needs of educational research in the United States;

"(F) submit an annual report to the President on the activities of the Institute, and on education and educational research in general, (i) which shall include such recommendations and comments as the Council may deem appropriate, and (ii) shall be submitted to the Congress not later than March 31 of each year; and

Report to President and Congress.

"(G) meet at the call of the Chairman, except that it shall meet (i) at least four times during each fiscal year, or (ii) whenever one-third of the members request in writing that a meeting be held.

The Director shall make available to the Council such information and assistance as may be necessary to enable the Council to carry out its functions.

"The Council may employ, without the approval of the Director, without regard to the provisions of title 5, United States Code, governing appointments in the competitive service, and without regard to the provisions of chapter 51 and subchapter III of chapter 53 of such title relating to classification and General Schedule pay rates, not to exceed seven technical and professional employees, as the Council deems necessary to carry out its functions.".

5 USC 5101, 5331, 5332 note.

"(d)(1) The Director of the Institute shall be appointed by the President, by and with the advice and consent of the Senate.

Director.

The Director shall be compensated at the rate provided for level V of the Executive Schedule under section 5316 of title 5, United States Code, and shall perform such duties and exercise such powers and authorities as the Council, subject to the general supervision of the Assistant Secretary, may prescribe. The Director shall be responsible to the Assistant Secretary and shall report to the Secretary through the Assistant Secretary and not to or through any other officer of the Department of Health, Education, and Welfare. The Director shall not delegate any of his functions to any other officer who is not directly responsible to him.

80 Stat. 463; 83 Stat. 864.

"(2) There shall be a Deputy Director of the Institute (referred to in this section as the 'Deputy Director') who shall be appointed by the President and shall serve at the pleasure of the President. The Deputy Director shall be compensated at the rate provided for grade 18 of the General Schedule set forth in section 5332 of title 5, United States Code, and shall act for the Director during the absence or disability of the Director and exercise such powers and authorities as the Director may prescribe. The position created by this paragraph shall be in addition to the number of positions placed in grade 18 of the General Schedule under section 5108 of title 5, United States Code.

5 USC 5332 note.

80 Stat. 453; 84 Stat. 1955.

"(e)(1) In order to carry out the objectives of the Institute, the Director is authorized, through the Institute, to conduct educational research; collect and disseminate the findings of educational research; train individuals in educational research; assist and foster such

Research.

research, collection, dissemination, or training through grants, or technical assistance to, or jointly financed cooperative arrangements with, public or private organizations, institutions, agencies, or individuals; promote the coordination of such research and research support within the Federal Government; and may construct or provide (by grant or otherwise) for such facilities as he determines may be required to accomplish such purposes. As used in this subsection, the term 'educational research' includes research (basic and applied), planning, surveys, evaluations, investigations, experiments, developments, and demonstrations in the field of education (including career education).

"(2) Funds appropriated pursuant to subsection (b) for any fiscal year may be expended on projects and activities to disseminate (A) information on the results of educational research and development; and (B) other educational information. Projects and activities funded under this paragraph may include cooperative and jointly funded arrangements for such dissemination utilizing individuals who may be designated as 'Education Extension Agents'. Employment opportunities at the local level which are generated and funded through projects and activities carried out under the preceding sentence of this paragraph shall be made available to residents of the area to be served, if any such residents are qualified for, and apply for, such employment.

Research fellowships.

"(3) The Director may establish and maintain research fellowships in the Institute, with such stipends and allowances, including travel and subsistence expenses, as the Director may deem necessary to procure the assistance of highly qualified research fellows from the United States and abroad.".

(4) Not less than 90 per centum of the funds appropriated pursuant to subsection (h) for any fiscal year shall be expended to carry out this section through grants or contracts with qualified public or private agencies and individuals.

5 USC 101 et seq.

5 USC 5101, 5331, 5332 note.

(5) The Director may appoint, for terms not to exceed three years, without regard to the provisions of title 5 of the United States Code governing appointment in the competitive service and may compensate without regard to the provisions of chapter 51 and subchapter III of chapter 53 of such title relating to classification and General Schedule pay rates, such technical or professional employees of the Institute as he deems necessary to accomplish its functions and also appoint and compensate without regard to such provisions not to exceed one-fifth of the number of full-time, regular technical or professional employees of the Institute.

"(f)(1) In carrying out the functions of the Institute under this section, the Director shall, in accordance with the provisions of this subsection, make grants to, and enter into contracts with—

"(A) regional educational laboratories established by public agencies or private nonprofit organizations; and

"(B) research and development centers established by institutions of higher education or by interstate agencies established by compact which operate subsidiary bodies established to conduct postsecondary educational research and development.

"(2) No grants shall be made and no contract entered into under this subsection unless—

"(A) proposals for assistance under this subsection are solicited from regional educational laboratories and research and development centers by the Director;

"(B) proposals for such assistance are developed by the regional educational laboratories and the research and development centers in consultation with the Director;

"(C) proposals are submitted in an application, containing or accompanied by such information as is essential to carry out the provisions of this section, including assurances that the laboratory or center involved will—

"(i) be responsible for the conduct of the research and development activities;

"(ii) prepare a long-range plan relating to the conduct of such research and development activities;

"(iii) ensure that information developed as a result of such research and development activities, including new educational methods, practices, techniques, and products, be disseminated;

"(iv) provide technical assistance to appropriate educational agencies and institutions; and

"(v) to the extent practicable, provide training for individuals, emphasizing training opportunities for women and members of minority groups, in the use of new educational methods, practices, techniques, and products developed in connection with such activities; and

"(D) the Director determines that the proposed activities will be consistent with the education research and development program and dissemination activities which are being conducted by the Institute.

Panel for the Review of Laboratory and Center Operations. Establishment.

"(3)(A) The Director shall establish a Panel for the Review of Laboratory and Center Operations composed of not less than 10 members nor more than 20 members who shall be appointed by the Director from written recommendations submitted by educational laboratories and research and development centers which have submitted applications under the provisions of this subsection, and by associations of professional, commercial, scholarly, and educational associations, particularly associations or organizations engaged in educational research.

"(B) The Panel shall—

"(i) review, and prepare recommendations on, initial long-range plans submitted under paragraph (2)(C)(ii);

"(ii) review the operation of the laboratories and centers receiving assistance under this subsection and make recommendations for the improvement and continuation of individual laboratories and centers and for the support of new laboratories and centers; and

"(iii) not later than January 1, 1979, submit a final report to the Director and to the Congress containing such recommendations as the Panel considers appropriate and such interim reports as the Panel considers appropriate.

"(C) Each member of the Panel who is not an officer or employee of the United States shall, while engaged in the business of the Panel, be entitled to receive compensation at not to exceed the daily rate specified at the time of such service for Grade GS-18 under section 5332 of title 5, United States Code, including traveltime. While so serving on the business of the Panel away from his home or regular place of business, each such member shall be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703 of title 5, United States Code, for persons intermittently employed in the Government service.

"(D) The Director, for the use of the Panel, and pursuant to the recommendations of the Panel, is authorized—

"(i) to appoint, without regard to the provisions of title 5, United States Code, governing appointments in competitive service, and fix the compensation for, without regard to the provisions of chapter 51 and subchapter III of chapter 53 of such title relating to classification and general pay rates, such professional, technical, and clerical personnel as may be necessary; and

"(ii) to procure the services of experts and consultants in accordance with section 3109 of title 5, United States Code.

"(4) No regional edcational laboratory or research and development center receiving assistance under this subsection shall by reason of the receipt of such assistance be ineligible to receive any other assistance from the Institute authorized by law.

Federal Council on Educational Research and Development. Establishment.

"(g)(1) There is established within the Institute a Federal Council on Educational Research and Development (hereinafter in this subsection referred to as the 'Federal Council').

"(2) The Federal Council shall be composed of representatives of Federal agencies engaged in research and development relating to education, and shall include, but not be limited to, a representative designated by the Secretary of Defense, a representative designated by the Secretary of Labor, the Director of the National Institutes of Education, the Director of the National Institute of Health, the Director of the National Science Foundation, the Director of the Office of Child Development of the Department of Health, Education, and Welfare, and the Commissioner of Education.

"(3) The President shall designate the Director of the Institute to be the Chairman of the Federal Council,

"(4) The President shall appoint additional representatives of Federal agencies and may alter the membership of the Federal Council from time to time as he considers necessary to meet changes in Federal programs or in the organization of the executive branch of the Federal Government.

"(5) The Federal Council shall—

"(A) advise, and consult with, the Director of the Institute with respect to major problems arising in connection with carrying out the purposes of the Institute;

"(B) promote coordination between the programs and activities of the Institute and related programs and activities of other Federal agencies, including the joint support of activities to the extent such support is appropriate;

"(C) make an annual report to the Congress and the President on the status of educational research and development in the United States, including (i) a catalog of federally assisted programs in educational research and development; (ii) a report of the most significant findings of such research and development; and (iii) recommendations with respect to the manner in which such Federal research and development efforts may be improved; and

"(D) make recommendations to the Congress and the President with respect to effective means for the dissemination throughout the United States of information relating to educational research and development, and carry out an assessment of existing efforts used by Federal agencies for the dissemination of such information.

"(h)(1) In conducting educational research under subsection (e) which deals with specific education programs or the target populations of such programs, the Director shall consult with the appropriate administrators of such programs within appropriate Federal agencies.

"(2) The head of any Federal agency which conducts educational research or provides financial assistance for such research shall consult with the Director with respect to the design of programs of such research.".

(i) Where funds are advanced for a single project by more than one Federal agency for the purposes of this section, the National Institute of Education may act for all in administering the funds advanced.

(j) There are hereby authorized to be appropriated, without fiscal year limitations, $550,000,000, in the aggregate, for the period beginning July 1, 1972, and ending June 30, 1975, to carry out the functions of the Institute. Sums so appropriated shall, notwithstanding any other provision of law unless enacted in express limitation of this subsection, remain available for the purposes of this subsection until expended.". "There are also authorized to be appropriated for such purpose $100,000,000 for fiscal year 1977 and $200,000,000 for each of fiscal years 1978 and 1979.". Appropriation.

THE PANEL'S CHARTER

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE

CHARTER

Panel for the Review of Laboratory and Center Operations

National Institute of Education

PURPOSE

Under 20 USC 1221e, the National Institute of Education is responsible for seeking to improve education in the United States through such means as helping to solve or alleviate the problems of American education and strengthening the scientific and technological foundations of education. The authorizing legislation also mandates the National Institute of Education to build an effective education research and development system. In order to assist the Director in the assessment of the plans and capabilities of the educational laboratories and research and development centers, Congress has mandated the creation of a Panel for the Review of Laboratory and Center Operations. In accordance with this congressional directive, the National Institute of Education will establish this advisory panel. The panel will be composed of representatives of the educational R&D, practitioner, and scholarly communities. Laboratories and centers have been defined by Congress as:

a. Regional educational laboratories established by public agencies or private, non-profit organizations and

b. Research and development centers established by institutions of higher education or by interstate agencies established by compact which operate subsidiary bodies established to conduct postsecondary educational research and development.

AUTHORITY

This panel is established in accordance with, and is governed by Section 405 of the General Education Provisions Act as amended by Section 403(d) of the Education Amendments of 1976 which sets forth the requirements for the creation of this panel's operations; and Public Law 92-463 which provides standards for the formation and use of advisory committees.

FUNCTIONS

Generally, the Panel for the Review of Laboratory and Center Operations will advise the Congress and the Director of the National Institute of Education on plans submitted by the institutions. Specifically, the panel will perform the following functions in carrying out its charter:

- Review and prepare recommendations on initial long-range plans submitted by educational laboratories and research and development centers.

- Review the operations of the laboratories and centers and make recommendations for the improvement and continuation of individual laboratories and centers and for the support of new laboratories and centers.

STRUCTURE

The panel shall consist of fourteen (14) members plus a chairperson to be selected by the Secretary or his designee. Four (4) alternate members shall be selected to serve in the event that a permanent member should, for some reason, leave the panel. Members shall be selected by the Secretary or his designee from written recommendations submitted by educational laboratories and research and development centers, and by professional, commercial, scholarly and educational associations, particularly associations or organizations engaged in educational research. No fewer than seven (7) members will be educational practitioners.

Members will be invited to serve until the new authorization expires on September 30, 1979. Any alternate appointed to fill a vacancy shall serve only for the unexpired portion of his predecessor's term.

As authorized by Section 405 (f)(3)(D) of the General Education Provisions Act, the Director, pursuant to the recommendations of the panel and for the use of the panel, may appoint professional, technical, and clerical personnel and experts and consultants as needed by the panel.

Management and staff services shall be provided by the Office of Planning, Budget, and Program Analysis of the National Institute of Education, who shall provide an Executive Secretary.

MEETINGS

The panel will be scheduled to meet at least four (4) times a year. The Director or his designee will be present at, and shall approve the agenda for, all meetings.

Meetings shall be open to the public except as determined otherwise by the Secretary or his designee. Notice of all meetings shall be given to the public in accordance with applicable laws and regulations.

Meetings shall be conducted, and records of the proceedings kept, as required by applicable laws and Department regulations.

COMPENSATION

Each member of the panel who is not an officer or employee of the United States shall, while engaged in the business of the panel, receive compensation at the rate of $100.00 per day. While serving on the panel away from his home or regular place of business, he shall be allowed travel expenses plus per diem in accordance with Joint Travel Regulations and HEW travel policy.

The Director, for the use of the panel and pursuant to the recommendations of the panel, is authorized to appoint without regard to the provisions of Title 5, United States Code, governing appointments in the competitive service, and to fix the compensation for, without regard to the provision of chapter 51 and subchapter III of chapter 53 of such Title relating to classification and general pay rates, such professional, technical, and clerical personnel as may be necessary; and to procure the services of experts and consultants in accordance with section 3109 of Title 5, USC.

ANNUAL COST ESTIMATE

The estimated maximum cost for the panel's operations, including compensation and travel expenses for members but excluding staff support, is $65,000. The estimate of annual person years of staff support required is 2.5 at an estimated annual cost of $45,000. The estimated cost for experts and consultants for use by the panel is $30,000, bringing the total estimated cost to $140,000.

REPORTS

The panel shall submit a final report to the Director and to Congress not later than January 1, 1979, containing such recommendations as the panel considers appropriate. Interim reports may be submitted at the discretion of

the panel. The reports shall include a list of members and their business addresses, the panel's functions, dates and places of meetings, and a summary of panel activities along with recommendations. A copy of each report shall be provided to the Department Committee Management Officer.

TERMINATION DATE

The panel will expire with the authorizing legislation on September 30, 1979. The charter will terminate two years from the date of approval.

APPROVED

AUG 6 1977

DATE

SECRETARY

SELECTION, COMPOSITION, AND OPERATION OF THE PANEL

Selection

The Panel was given legislative life in October 1976. However, the transition to a new administration delayed our selection until August 1977. We received our charter in that month and met for the first time in September 1977.

The Panel was selected through an extensive and participatory process. The National Institute of Education solicited nominations from regional education laboratories; research and development centers; and professional, commercial, scholarly, and educational associations, resulting in a pool of over 450 candidates. Resumes of applicants were ranked by a committee of NIE senior staff according to evidence of ability to (1) judge the quality of research and development plans and activities as either a producer or a consumer of educational R&D; (2) assess institutional capability and operations; (3) understand the Federal role in education; (4) function effectively in a group environment and in an advisory capacity; and (5) understand the views of diverse constituencies. Then incumbent NIE Director Harold H. Hodgkinson assembled a final pool of candidates with an eye toward balance in regional representation, sex, and source of nomination and with an emphasis on participation of educational practitioners. Incoming NIE Director Patricia Albjerg Graham made the final selection of 15 Panel members.

Composition

NIE devoted painstaking care to the selection of a Panel that would be truly representative of the broad educational interests in this Nation. In all modesty, we believe that that goal was achieved.

The Panel reflects an unusually representative balance between the sexes and among regions of the country, racial groups, and professions. As originally constituted (one of our members had to resign because of other commitments), eight members of the Panel are women; four are black; and one is Hispanic. We represent all major regions of the country; and, as is clear from the list of professional affiliations that follows, we represent a broad spectrum of the educational professions, with a firm emphasis on practitioners.

Panel Members

Dr. John L. Crew, Chairperson
Superintendent of Public Instruction
Baltimore City Public Schools
3 East 25th Street, Room 300
Baltimore, Maryland 21218

Dr. Crew is Superintendent of one of the largest urban school systems in the country. He has long experience in research and administration, including positions as Deputy Superintendent of Planning, Research, and Evaluation of the City of Baltimore public schools; and Professor and Associate Director of the Research Learning Center at Westchester State College in Pennsylvania.

Dr. Frederic Mosher, Vice-Chairperson
Program Officer
Carnegie Corporation of New York
437 Madison Avenue
New York, New York 10022

Dr. Mosher is responsible for the Carnegie Corporation's program in elementary and secondary education.

Ms. Harriet Adair
Teacher
Franklin High School
5405 S.E. Woodward
Portland, Oregon 97206

Ms. Adair is a Title VII Coordinator for Portland, Oregon, Public Schools. She was recommended to serve on the Panel by the National Education Association and is a highly respected teacher. She brings the practical experience of a teacher practitioner to the Panel.

Dr. Anne Anastasi
Professor of Psychology
Graduate School of Arts and Sciences
Fordham University
Bronx, New York 10458

Dr. Anastasi is a respected author on individual differences and psychological measurement. She is past President of the American Psychological Association.

Dr. Helen Bain
Professor of Education
Auston Peay State University
205 Claxton Building
Clarksville, Tennessee 37041

Dr. Bain is a past President of the National Education Association and served on the National Advisory Council for the Elementary and Secondary Education Act, Title III, 1965-70.

Mr. Patrick Daly
Vice-President
American Federation of Teachers
Teacher
Edsel Ford High School
20601 Rotunda Drive
Dearborn, Michigan 48124

Mr. Daly is a Chairman of the Education Research Committee of the AFT and a full-time teacher of Humanities and Social Studies in Dearborn, Michigan. He has represented the AFT as a speaker and panelist on numerous occasions.

Ms. Sandra Feldman
Vice President
American Federation of Teachers
Director of Staff, United Federation of Teachers
260 Park Avenue South
New York, New York 10010

Ms. Feldman worked as a teacher in New York City, has a longstanding interest and involvement in the field of civil rights, and has authored numerous articles on education and teacher unionism.

Dr. Lovelia Flournoy
Principal
111th Street Elementary School
Los Angeles, California 90059

The 111th Street School, which Dr. Flournoy directs, is well known as an innovative school. The school was selected by the California State Department of Education as one of two model elementary schools in the State with exemplary and effective compensatory programs.

Dr. Norman Francis*
President
Xavier College
New Orleans, Louisiana

Dr. Francis is President of the only predominantly black Catholic university in the Nation. Dr. Francis is both an attorney and an administrator with a broad educational perspective.

Dr. Calvin Frazier
State Commissioner of Education
State Office Building
201 East Colfax
Denver, Colorado 80203

Dr. Frazier has had extensive involvement with the educational laboratory concept from its early stages. He has teaching and administrative experience from the elementary school level through higher education.

Dr. Hendrik Gideonse
Dean
College of Education and Economics
University of Cincinnati
Cincinnati, Ohio 45221

Dr. Gideonse served as a member of the Title IV Task Force, which established educational laboratories, and has a reputation as an educational leader with an exceptional understanding of the importance of research and development for educational change and improvement.

Dr. Norma Hernandez
Dean
College of Education
University of Texas
El Paso, Texas 79968

Dr. Hernandez has reorganized the college of Education at the University of Texas at El Paso. She has been a leader in bilingual education and is the author of numerous articles on classroom systems.

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*Dr. Francis resigned in 1977 for personal reasons.

Dr. Philip Jackson
Professor of Education and Human Development
University of Chicago
5835 Kimbark Avenue
Chicago, Illinois 60637

Dr. Jackson has served as Director of the University of Chicago's Laboratoy School and as Chairman of the University's Department of Education.

Ms. Carol Kimmel
623 26th Avenue
Rock Island, Illinois 61201

Ms. Kimmel is the immediate past President, National Parent Teacher Association, Chicago, Illinois. Ms. Kimmel has served on many State and national committees and commissions and has been an elected school board official.

Ms. Ruth Mancuso
President
New Jersey State Board of Education
Gloucester County Office
Sewell, New Jersey

Ms. Mancuso also serves on several national committees and boards in the area of education. She has been active in many civic associations and brings the viewpoint of concerned citizens as well as her professional experience to the Panel.

Operations

Meetings Our charter instructs us to meet at least four times annually. In fact, the Panel has met 11 times between the August 1977 receipt of its charter and the January 1979 submission of this Final Report. The dates and places of those meetings are:

September 11-12, 1977	Washington, DC
October 22-23, 1977	Washington, DC
December 17-19, 1977	Washington, DC
January 7-9, 1978	Washington, DC
February 11-12, 1978	Washington, DC
April 15-17, 1978	Washington, DC
July 17-18, 1978	Washington, DC
September 23-24, 1978	Denver, CO
October 28-29, 1978	Washington, DC
November 18-19, 1978	Washington, DC
December 9-10, 1978	Washington, DC

Except for the September 1978 meeting, all were open to the public. Minutes of those meetings are available from the office of the Panel staff at the National Institute of Education, 1200 19th Street N.W., Washington, DC 20208.

In addition, several Panel members met with the National Council on Educational Research on May 19, 1978. The Panel as a whole met with NCER on September 15, 1978. We have accepted an invitation to meet with the Council again in January 1979 to discuss our Final Report.

Interim Report Our charter also instructed us to "review and prepare recommendations on initial long-range plans submitted by educational laboratories and research and development centers." The Panel complied with this charge in January 1978 by submitting an Interim Report to the Director of NIE. This report is reproduced in Appendix B, which contains a description of the process whereby the reviews were conducted.

Site Visits To comply with the mandate of our charter to "review the operation of the

laboratories and centers," teams of Panel members conducted site visits at all 17 of those institutions between April and September 1978. Each team approached the visit with a common set of questions to provide the organizing framework for the reports. Typically, the visits lasted 2 days. Teams consisted of from two to five Panel members. Each Panel member made from three to eight site visits. The reports on those visits from the teams to the Panel are reproduced in Appendix C.

Staff Our operations have been managed by two sets of staff from the National Institute of Education. From our inception through August 1978, our Staff Director was Carolyn Breedlove, who had the help of Program Assistant Barbara Sanders. From August 1978 until the present, our Staff Director has been Grady McGonagill, working with Program Assistant Betty Baten.

Appendix B: The Panel's Interim Report

INTRODUCTION

This report is in response to a September 1977 request from the Director of the National Institute of Education (NIE) for the Panel for the Review of Laboratory & Center Operations to advise the Director on the long-range plans submitted to NIE by the 17 regional educational laboratories and research development centers. The Panel, at its first meeting in September 1977, accepted the January 1978 deadline for this report in order to help meet the immediate needs of the Director and as a means to become better acquainted with the laboratories and centers. Given the time constraints, the objectives and the intent of this report are limited. It does not represent an attempt to evaluate the previous performance of the centers and laboratories; nor it is an attempt to judge the quality of individual projects proposed by the laboratories and centers; nor does it propose specific terms for arrangements between NIE and individual centers and laboratories. Rather, the report is intended to convey to the Director the general impressions of the Panel about (1) the relevance of the missions proposed in the plans; (2) the seeming ability of individual centers and laboratories to carry out their plans, (3) the appropriateness of laboratories and centers governance and management structures; and (4) the presence and seriousness of issues common to most laboratories and centers which need attention. In general, the Panel is recommending to the Director that NIE engage in negotiations with 15 of the centers and laboratories to establish long-term institutional relationships. Specific concerns (some more serious than others) of the Panel regarding individual centers and laboratories, which should form the basis of negotiations, are suggested.

The report is divided into five sections. The first discusses some of the inherent problems and limitations of addressing the task requested of the Panel by the Director. The second section presents the procedures followed by Panel members in assessing the plans. This is followed by a discussion of some general reactions to all the plans, and then by a discussion of some specific reactions to individual plans. A number of issues relevant to the relationship between NIE and all of the laboratories and centers emerged during the course of the Panel's review. These are introduced in the final section of this report and will be pursued by the Panel in the next few months.

PROBLEMS, LIMITATIONS, AND STRENGTHS OF THE REPORT

In order for this report to be useful to the Director, it was necessary that it be prepared within a restricted time period. The problems imposed by the short timeframe were compounded by the fact that Panel members reside in different parts of the country and fill full-time positions. Therefore, Panel members were required to make judgments without having had the benefit of site visits to the individual centers and laboratories, without having reviewed the past work produced by the laboratories and centers, and without having had an opportunity to consider general policy and R&D system questions before assessing particular institutions. Furthermore, judgments were made primarily on the basis of general long-range plans, not on the basis of specific project proposals. This made it difficult to predict the scope and quality of work which actually would be performed by the centers and laboratories. As a result of these limitations, the Panel members agreed that it

could not make recommendations about the *details* of the relationships between NIE and individual laboratories and centers or about appropriate funding levels for individual institutions or about the worthiness of specific projects. The Panel plans to address these specific areas during the course of the year.

However, in spite of the above limitations, each panel member read all of the 17 long-range plans, studied the NIE staff reports on each center and laboratory, interviewed the directors and selected staff members from each institution, and also interviewed NIE Associate Directors and their senior staff members responsible for monitoring or reviewing the laboratories and centers. As a result, the opinions and recommendations in this report represent the consensus of a representative group of practitioners and researchers who have probed extensively into the plans of the centers and laboratories and the relationships of NIE with them. Therefore, while the members of the Panel are still limited by knowledge of many of the specifics of the operation of individual laboratories and centers, we have a distinct advantage in knowledge of the general context in which the centers and laboratories as a group of institutions have been operating.

THE ASSESSMENT PROCEDURES

The procedures used by the Panel in assessing the plans of the laboratories and centers included the following: (1) written critiques by individual members of each of the 17 plans; (2) reviews of NIE staff reports; (3) hearings and interviewing of centers and laboratories Directors and selected staff; and (4) interviewing of NIE Associate Directors and staff associated with laboratories and centers. Each of these is discussed below.

Written Critiques

The plans of each of the 17 centers and laboratories were read by individual panel members and written critiques were prepared. Panel members responded to seven general questions. We reported on the importance/relevance of the laboratories and centers missions; the likelihood of the centers and laboratories implementing the plan; the governance and management of the laboratories and centers; the congruence of the centers and laboratories plan with the original model for laboratories and centers; and any other concerns or commendations about the centers and laboratories. Panel members also were asked to give a "forced choice" recommendation regarding a future relationship between NIE and each laboratory and center. The choices were: 'A'–"ready for a long-term relationship"; 'B'–"not yet ready–should submit request for planning support"; 'C'–"warn that current relationship is in serious jeopardy."

Review of NIE Staff Reports

NIE staff persons responsible or who probably would be responsible for individual laboratory and center projects prepared reviews of the related portions of the plans. These were then synthesized by whichever of the Associate Directors of the Institute had been assigned overall responsibility for the particular center and laboratory. These syntheses were then reviewed by the Panel members.

Hearings and Interviewing

The Panel met as a group for 6 days to discuss its views and to question directors and staff members of the laboratories and centers as well as NIE staff persons. The meetings were held

over two weekends, December 17-19 and January 7-9. The Panel voted during these meetings on its recommendations for each of the centers and laboratories. Summary statements and the recommendations of the Panel for each laboratory and center are presented later in this report.

GENERAL REACTIONS TO PLANS

The Panel decided to recommend that NIE negotiate long-term relationships with 15 of the labs and centers. None of these, however, was without qualification. Specific concerns which the Panel feels should be addressed in the negotiations are suggested for each center and laboratory. For the remaining two institutions the Panel recommended planning support and support for project completion until a determination is made regarding the appropriateness of a long-term relationship.

There were a number of concerns which were common to many of the laboratories and centers. These included equal employment and affirmative action issues, confusion over the definition of mission, conflict between centers and laboratories and NIE staff, and concern about how research questions and priorities were decided.

Each of the labs and centers was queried specifically about the employment of minorities and women on staff and also about the representation of minorities and women on boards. In general, the answers were disappointing enough that the Panel is considering the formation of a subcommittee to investigate this area more carefully and to formulate a recommendation to NIE that they find a way to ensure that the laboratories and centers have an adequate representation of minorities, women, and practitioners on their boards and on their senior staffs.

An attempt was made by the Panel to assess the degree to which laboratory and center operations were in congruence with the original definitions of the roles of labs and centers. Panel members found it difficult in some cases to distinguish, on the basis of the plans, between labs and centers. Panel members felt that part of this confusion was due to a history of changing priorities on the part of NIE.

Through the course of hearing statements by NIE staff persons and representatives of labs and centers, underlying conflict between these groups became evident. The bases for this conflict were [illegible]t for the Panel to sort out, leaving Panel members concerned about how to interpret criticisms which NIE staff people had about the operation of the centers and laboratories.

Panel members were also concerned about whether the mechanisms used to decide upon research agendas adequately ensured that the problems and issues most pertinent to practitioners were being addressed. After establishing research agendas, it is important that a process be established by NIE for eliminating needless duplication of research effort. The Panel was concerned that a structured communication system was not operating between researchers having similar interests in the various labs and centers.

REACTIONS TO INDIVIDUAL PLANS

Summary statements and recommendations based on the plans submitted by each of the laboratories and centers are contained in this section. Panel members had considerable discussion about the meaning of the forced choice recommendations: 'A'–"ready for long-term relationship"; 'B'–"not yet ready–should submit

request for planning support"; 'C'—"warn that current relationship is in serious jeopardy." Panel members felt some uneasiness about making such choices at this time and on the basis of general long-range plans. Nevertheless, the Panel is recommending that NIE negotiate long-term institutional relationships with 15 of the labs and centers and provide support to plan such relationships with the remaining two institutions. It is leaving open for further consideration by the Panel recommendations about the specifics of the relationships, such as length of contracts, types of contractual arrangements, and the merits of particular projects. Subject to some specific concerns and the limitations on our ability to make informed detailed judgments about particular projects which NIE is currently supporting, the Panel is generally willing to recommend the continuation and completion of ongoing projects. But we are not stressing the issue of particular projects (old or new) in our basic recommendations because we want to focus attention on institutional questions. We emphasize that focus because it has become evident that NIE's "program purchase policy" has had a debilitating effect on the development of the labs and centers and that their potential contributions cannot really even be tested until NIE begins to deal with them, and they have had a chance to perform, as institutions. We are not, as we say, in a position yet to make recommendations about the details of these institutional commitments. We will have more to say about this in the coming year. But we do urge that NIE and the laboratories and centers for whom it has been recommended now work out institutional bases for their relationships.

Appalachia Educational Laboratory

The Panel agreed that the Appalachia Educational Laboratory (AEL) has the potential to play an important role in helping the schools of its region to apply research and development approaches and products to the solution of the problems facing them. Because of that we suggest that NIE work out the details of a long-term institutional relationship with AEL. The Panel also felt that much of the current work being carried out by AEL is deserving of continued support. These recommendations are qualified, however, by a number of specific concerns The Panel's conclusions can be summarized in three parts:

1. The Panel thinks that the functions described in the AEL Plan under the heading "Educational Services Program," particularly those of trying to identify and be responsive to the research and development needs of the region and of providing technical assistance and support to states and school systems in adapting R&D knowledge and products to their needs, would provide the basis for a long-term institutional relationship with NIE. But we felt that the details of how those functions were to be performed and how AEL is to be organized to deliver them were described too vaguely to justify the specific commitment requested.* We suggest that NIE ask AEL to

*For instance, a number of Panel members were concerned that there seemed to be too little provision for full-time staff for the educational services function, and they were afraid that the idea of pulling people out of their ongoing R&D commitments to provide service, while attractive in design and intent, may not prove to be easily feasible. There was comment, too, that the current projects seemed to leave AEL light on staff who would be likely to be concerned with many of the central problems facing schools in their day-to-day operations. Issues also were raised about the value of the complex "need-sensing" procedures which AEL contemplates introducing and about the functioning of the governing board as an alternative mechanism for assessing the region's needs.

request sufficient funds to cover the staffing, time, and other resources necessary to plan those functions in sufficient detail so that a long-term contract for them could be negotiated. We anticipate that such planning would involve a good deal of consultation with other institutions and agencies in the region and considerable exploration of models for ways in which such functions can be carried out most effectively; and that the planning period would extend at least through the remainder of FY 1978, and perhaps beyond. We suggest that NIE should expect this planning to require support above and beyond the amounts necessary to continue the contract work which AEL already has underway.

2. The Panel placed heavy emphasis on its concerns about equity, both in the staffing and in the governance of AEL, focusing specifically on the lack of representation of women, minorities, and teachers on the AEL governing board. The Panel strongly urges NIE to request from AEL a clear plan for remedying these problems.

3. The Panel indicated general approval of the three ongoing AEL R&D programs: Career Decision Making, Experimental Education, and Early Childhood and Parenting. We recommend that NIE negotiate contracts appropriate for continuation and completion of that work. Concerns were expressed, however, about the overall NIE strategy and possible duplication in the career decisionmaking area, the lack of focus and coherence in the future projects anticipated in the experiential education area, the research quality in the longitudinal study, and the priorities and adequacy of service delivery in the early childhood area. The Panel recommends that NIE note these concerns in its negotiations on proposals for these specific programs, and it would like to stress that its opportunity for review of the details of these programs has not yet been sufficient to justify recommending either blanket approval of them or any specific disapproval of them. We are simply indicating that the three lines of work lie in important areas, and that AEL seems to have been making a serious and significant effort on them.

Learning Research and Development Center

In general the Panel indicated that they felt the work being carried out by the Learning Research and Development Center (LRDC) is clearly of very high quality, and we recommend that NIE invite proposals for long-term support of the work described in the plan. There were, however, three areas of concern which should be addressed.

The first involved the composition of the staff of the Center, particularly the representation of minorities in the senior staff. The point was made that the Center in its emphasis on adaptive education should itself have representation of the populations with whom it hopes to help the schools learn to deal effectively. This should serve both to inform its own understanding of the kinds of differences which exist and to be helpful in training teachers to recognize and respect those differences. Given the new interest in the Center's plans in "learning environments and social processes," a question also was raised about the representation of disciplines other than psychology on the staff—particularly anthropology and sociology—which would be required for addressing those issues adequately.

While there seemed to be some recognition of these needs at the Center, the Panel urged NIE to seek a clear commitment and a plan for meeting them in the Center's proposal.

A second concern was addressed in part to the Center and in part to NIE, and had to do with the seeming duplication of areas of work which appear in the labs' and centers' plans. In this case attention focused on LRDC's work in reading and in evaluation, and it was noted that other institutions seem to be making parallel efforts, particularly in the area of identifying school effects.

Dr. Glaser was reassuring on the complementary and mutually supporting relationship between the Center and the Illinois group and others working on reading. The Panel recognized that in many areas a great deal of independent and parallel work is wise and necessary, but we urge the NIE staff to hold to some sense of strategy in supporting parallel work. This is particularly an issue in the case of R&D Centers where the argument presumably is made that the problem area being addressed is of central importance and this institution is an appropriate place to support a concentrated, long-term attack on it. The criteria for deciding which problems, and how many, justify such an approach, and how much of NIE resources should be committed to an institutional approach to them (as opposed to a more diversified one) are complex, and the Panel will have to return to these issues later in our work. In the meantime the Panel feels that LRDC is quite a good example of a coherent attack on a reasonably well-defined set of important problems, and that it could represent a sensible institutional piece of a more general NIE strategy in the area of adaptive approaches to basic skills instruction.

The third issue involves the question of how the Center's research priorities are decided. The Panel understands that such decisions have to represent a complicated balance of feasibility, staff interests and competence, and national needs. But given the significance of the special relationship being considered by NIE, we think that mechanisms should be established to ensure effective participation of a rather broad set of interests—including particularly practitioner interests—in such decisions. The Center advisory group struck the Panel as being rather heavily weighted toward the academic. This will be an issue in all—or most—of the centers, and the Panel urges NIE to press for more adequate attention to the problem by all of them.

Southwest Regional Laboratory for Educational Research and Development

The Panel expressed a somewhat confused reaction to the Southwest Regional Laboratory for Educational Research and Development (SWRL). We were impressed that it seems to be a strong institution, but at the same time we were puzzled about its institutional identity. The plan left us with the sense of a set of research projects, each of them potentially important in itself, but without a sense of overall coherence and mission. In addition the plan's shift in emphasis to a greater focus on research left the panel uncertain about the nature of the regional service role which SWRL intends to play, if any. The plan gives the impression of an institution whose purposes are more like those of some of the R&D centers than they are like the other labs. The Panel agreed, however, that much of the work planned by SWRL is sufficiently promising for us to recommend to NIE that it seek a basis for longer-term support.

However, we were not able to look into the particular projects in sufficient detail to be sure that their quality would merit an ultimate decision to support them for the periods and amounts requested. The Panel was also sympathetic to the idea of an institutional commitment to SWRL, although our confusion about the question of institutional identity suggests that question will need further attention as the relationship is worked out.

On more specific points: Some concern was expressed that there seemed to be insufficient teacher representation in SWRL's governing structure. The Panel recognized that an effort has been made to ensure representation of women and minorities on the staff, but felt that more could still be done, particularly at the leadership level and with respect to Hispanic representation, given SWRL's location. The Panel paid particular attention to the planned work on the bilingual, bicultural program, and indicated some concern about the seeming lack of a guiding theory and about the slighting of cultural aspects in favor of the linguistic issues. Questions about possible duplication and about strategy were again addressed to NIE, particularly with regard to the work in communication and evaluation.

Northwest Regional Educational Laboratory

The Panel was impressed with the relative clarity of the Northwest Regional Laboratory (NWRL) plan, with its membership and governance structure, and with its history of services to its region. We felt that it had a good balance of research and service, better than many we have seen, and we think it appropriate for NIE to work out a long-term institutional relationship with this Lab.

The Panel expressed some concern about the large number of projects being carried out or planned by NWRL and wondered whether staff time and resources would be adequate to carry them all out well. The work on functional literacy and competency assessment was singled out for particular attention, and while there was agreement that these were important areas and NWRL had made a reasonable start on some aspects of them, there was a worry that the approach described was not adequately thought out and seemed to rely too much on "armchair," and possibly outmoded, theorizing. Similar interest and concern was expressed about the new work on evaluation models, and we urge that NIE staff take some care in seeking more adequate proposals in these areas to ensure that the work will be effective and useful, and that it fit into a more general national strategy for advancing these fields. The rural, Native American, and computer projects attracted some positive comment. As has been the case with other institutions, the Panel has not had a sufficient chance to consider the project plans in detail, but the general purposes being covered seemed to us to be important. NWRL's reputation in the area of dissemination of R&D results seems to be good, and the Panel viewed that function as one central to the concept of a regional lab. NIE might consider focusing on dissemination as a central aspect of its institutional commitment to NWRL. We felt, however, that NWRL should be clearer about what it has already learned—and what it hopes to accomplish and how it plans to assist the educational agencies in its region to take advantage of R&D in solving their problems.

The Panel recognized that NWRL is making a conscious effort in addressing equity issues in its staffing, but we felt that there is still room for improvement, particularly at the cabinet level of the Lab.

Center for Social Organization of Schools

The Panel was impressed with the quality and sophistication of the past and proposed research outlined by the Center for Social Organization of Schools (CSOS). Clearly they have a competent staff and a coherent methodological approach. We were more concerned, however, about the basis for choosing research priorities, about the audience for the results, and about the substantive coherence of the work. The Panel felt that there is some danger that the CSOS may be a case of academics writing for academics, and that the results may not be as useful for policymakers and practitioners as CSOS hopes. We pressed them to consider more effective ways of getting the interests of policymakers and teachers expressed early in the process of choosing topics and designing research, and we urge NIE to consider doing the same. We also urge continued—and we hope successful—attention to increasing representation in CSOS's senior staffing. (On staffing, there was also concern about the high proportion of Hopkins-trained staff at CSOS, with the attendant dangers of "inbreeding" and the odds against promotion and tenure.)

The Panel was somewhat split on the issue of whether "nonexperimental" methods (as we, with some dissent, called them) using large-scale data bases were likely to produce results useful and trustworthy for policymakers, but we agreed that the topics which would be studied were important. It is not clear that the "social organization of schools" is in fact a central organizing principle of the research. It looks as though the work is held together more by a common methodological approach (with the exception of the earlier curriculum work using games and simulations).

Clearly the studies proposed will be done competently, and the Panel felt that each may well justify a commitment of the time and resources necessary to complete them. The Panel as a whole felt that the quality of the Hopkins staff and their work could justify a longer term institutional commitment as well, particularly if the concerns about dissemination and representation in research policy decisions are addressed appropriately. The NIE should itself, however, be clearer about the substantive rationale for such a center. Does it take the focus on social organizational questions as central, or is the refinement and application of a particular set of research methods a sufficient justification? And does CSOS's own conception of its institutional mission agree with NIE's?

Center for Education Policy and Management

The Panel agreed that the study of schools as social organizations, taken particularly from the perspective of administrators who have responsibility for managing those organizations, is of sufficient importance to justify a long-term commitment to an institution to work on such questions. On that basis the Panel is willing to recommend to NIE that it work out such a commitment to CEPM. In our discussion we noted, however, that the Center for Education Policy and Management's (CEPM) title describes a much broader set of substantive fields than CEPM actually addresses in its plan, and we suggest that NIE will need to decide whether and where it wants work done on those missing pieces (finance, collective bargaining, and so on).

The Panel observed that while the plan makes a bow to a coherent conception of the Center's work, the actual projects seem rather more scattered. We felt that serious attention needs to be

paid to the ways in which priorities are set and projects chosen, and those ways must provide for serious involvement of interests more representative than the individual concerns of particular scholars. We felt that the use of the advisory mechanisms mentioned by CEPM was not clearly described, and the mechanisms themselves did not ensure a broad representation of views.

We also expressed a related concern about dissemination of the Center's results. For whatever reasons, including lack of resources and perhaps the vagaries of the relationship to NIE in the past, there seems to have been too narrow a reliance on the traditional academic modes of dissemination. We also raised questions about the extent to which the Center is able to offer service in the area of organizational development and about what it has learned about the ways such service can, or cannot, be delivered effectively. Such lessons would be of general interest to the educational community.

Members of the Panel expressed doubts about the quality, clarity, and appropriateness of some of the projects being planned (for example, the work on conflict, the conception of student as worker), but these comments were balanced by the enthusiasm of others, and we have not had the opportunity for a careful consideration of any of the projects. We would be comfortable with solicitation of proposals for support of those projects which make sense to NIE, along with support for the development, perhaps with further planning, of a more coherent institutional relationship.

The Panel recognized that CEPM has made some improvement compared to its earlier situation in the composition of its staff with respect to women, but its situation with respect to minorities is still, admittedly, weak. We hope NIE will continue to press CEPM on these questions.

Research and Development Center for Teacher Education

The Panel was impressed with the research and development Center's long history of maintenance of a high-quality effort in development and, more recently, in research in the face of considerable variation in funding priorities. The results of research on teaching should be of obvious relevance to many of the central problems facing school systems today, and the Panel recommends that NIE work out a long-term institutional relationship with the Center focusing on the study of teaching and recognizing the role this Center, the Michigan Center, and other institutions play in the network of researchers working on these topics.

We suggest that the Center still has a serious problem of representation of minorities and, to only a slightly lesser extent, women, in its executive council and staff. Given the potential importance of the implications of this research for the instruction of children and the training of teachers from these groups, we would hope that ways can be found immediately to improve representation in that council. We would make the same point about the composition of the about-to-be-created National Advisory Board. We urge that the Center's dissemination plans be spelled out in more detail and that they include practicing teachers as an intended audience—even for their more technical work.

Our consideration of the specific projects was of necessity superficial, but we think the basic ongoing work deserves continued support. We were impressed that the work with the Austin

district is a step in the right direction—and will be a force for coherence. We felt that the plan suggested some scattering of effort, and we hope that can be overcome and clearer, more coordinated priorities set as the institutional plan is worked out. Some doubts were expressed about the relevance (to the mission) and design of the dropout study. Members of the Panel expressed regret that there has been a shift over the years away from a concern for teacher education, and it was suggested that NIE should consider whether, how, and where work on that subject—which might be affected by the results of this Center's research—should be carried on. We also noted that some of the currently lively policy questions in teaching and teacher education seem to be missing from the Center's concerns (the teacher center movement and legislation were mentioned as an example).

Mid-Continent Regional Educational Laboratory

Mid-Continent Regional Educational Laboratory (McREL) is requesting funds to support planning of the revivification and extension of its role as regional lab. The Panel was impressed by the argument that McREL's region could use and would welcome the kinds of services it would like to offer, and we recommend that NIE accept the request for planning support.

Our discussion with McREL staff and NIE staff leads us to recommend additionally that this planning period be seen as an opportunity for a broad and flexible look at the possible models by which an institution can help the school systems and State departments in a region to adapt research and development products and processes to their own needs. We think it would be important for NIE staff to be involved in this process both in a supportive way and to be in a position themselves to learn from the process more about how local and State people perceive their needs and about what kinds of help will in fact reach them and be used. It would also be helpful for NIE to learn how to foster the development of an institution, or a structure, which can provide that help. It may be that aspects of what can be learned here could be carried over to some of the other labs.

The Panel raised a number of questions about the extent of the region which might be served by McREL, and it was clear that there are some jurisdictional issues which will need to be worked out with other labs and also that there may be areas not now served—particularly in the upper Midwest—which McREL should consider trying to serve.

Research for Better Schools

The Panel voted to recommend to NIE that it establish a long-term institutional relationship with Research for Better Schools (RBS). This was a split vote. In part the reason for the split seems to have been that those who were voting in favor were concentrating on RBS' success in having developed a set of close relationships and a constituency in its region and on the potential significance of the work RBS is beginning in the area of research utilization and in assisting the States in its region to implement their various school improvement programs. Those who voted against, however, were focusing on the "knowledge production" aspects of the plan and were suggesting that the substance of the plans was unclear and vague and that the kinds of staff who were likely to be able to carry out what seemed to be rather basic work did not appear to be available to RBS at this point. They were concerned that a whole new capacity for basic work would have to be built up at considerable

ost and with a substantial danger of redundancy, given comparable work going on elsewhere. Some panel members questioned the technical competence of the RBS staff to evaluate properly the education products they disseminate and to train the teachers in the application of these products.

A resolution of this disagreement may be possible if RBS were to accept that what it means by knowledge production in this context is not so much basic research on the basic skills but rather practical knowledge about which programs and approaches seem to work, and which do not (in particular school settings). It is hoped that this knowledge will grow out of programs like that in Pennsylvania or New Jersey's T&E efforts. What RBS would be doing, in that case, is helping to train local school people to learn from their own results—and training State and intermediate agency people to carry out and take over that function of assisting local districts. As the NIE staff review points out, even these functions are not very carefully spelled out. However, the Panel felt that if RBS and NIE could agree that such a function is intended and would be acceptable as a basis for a long-term commitment, an agreement could provide the occasion for working out the details of an acceptable proposal. The Panel is not able at this point to make specific recommendations about the kinds of staffing and levels of funding which might be required, but there seemed to be a good deal of enthusiasm about the possible importance of such work if the details could be worked out.

The Panel also expressed concern about the representation of teachers, and of women and minorities, on RBS' governing board. We contrasted that situation with RBS' relative success in obtaining a representative staff. We would urge NIE to emphasize the former concern in their negotiations with RBS and its board.

Members of the Panel expressed some concern about the plans for work in citizenship education, and there was disagreement about the priority which should be given to such work. We did not at this point try to resolve that disagreement.

Southwest Educational Development Laboratory

The Panel agreed that the Southwest Educational Development Laboratory has been striving to meet the needs of its region through applied research and the development of educational materials and technical assistance. We recommend that SEDL and NIE work out a long-term relationship, paying particular attention to this service role. In making this recommendation, however we urge consideration of a number of points.

We were concerned that SEDL is attempting to work on many different programs, and the Panel asks that SEDL consider setting priorities among them. We recognize that NIE provides less than 50 percent of SEDL's funding, and so it has somewhat limited leverage on a lab which is attempting to be responsive to the region's concerns—and finding a market for their responsiveness. We, too, are not in a position to second-guess those choices, but the range of activities left us concerned about coherence.

The Panel also noted in this Lab, as in many of the others, that there is an issue of possible overlap of work with that of other laboratories and centers. NIE will need at some point to consider this problem more carefully.

The Panel noted that SEDL is moving in the direction of representation of teachers, minorities (Native Americans particularly), and women in its board of directors—at the same time as it moves to represent the States in its expanded region—but we feel that it should be asked to develop a more explicit plan to accomplish these ends. We were impressed with SEDL's efforts to involve teachers and parents in its projects, noting particularly in this regard the bilingual and community and parenting programs.

The Panel was impressed that SEDL is particularly well located and well staffed to carry on work on bilingual education. We discussed the program on the educational implications of possible cultural differences in cognitive styles at some length. We noted again that this was a logical area in which to carry on such work, but asked for clarification on the relative balance between basic and applied concerns in the project. We also urged that the possible confusion of socioeconomic class-based differences with culturally-based differences be noted and that the notion of cognitive style not be too narrowly defined or stressed to the exclusions of other relevant differences.

The Panel did not comment in detail on the proposed new projects but suggested that some might require further planning support before a full go-ahead is given. The functional literacy work was specifically mentioned in this regard.

The Panel urged SEDL to pay particular attention to issues of dissemination of their research findings to practitioners in the region.

Center for Vocational Education*

The Panel recommended that NIE negotiate a long-term institutional relationship with CVE.

The Panel assessed the CVE's mission as one of high priority, addressing an important educational topic. The stated mission of CVE and the four proposed programs are relevant to NIE missions in the areas of equity, management, career and vocational preparation, dissemination, and utilization of educational research and development.

CVE's linkages with all levels of the educational community, its staff and its support in the university setting provide a supportive basis for its carrying out its role as a research institution. It offers reasonable assurance that implementation of its plan will have a genuine influence on the quality of career and vocational education.

The Panel expressed special support for the evaluation proposals contained in the plan. It recommends that NIE consider the development of a longitudinal study proposal for the evaluation of career and vocational education as they relate to a client's choice, accessibility, transferability, and progression. It is recognized that this could be a fairly expensive effort but is one which promises to have a significant impact on the curriculum and costs of career and vocational education. Panel members also felt that particular attention should be given to the relevance to minority, and especially youth, unemployment of any of the research the CVE plans to do.

As with many of the laboratory and center plans, the Panel expressed concern for possible duplication and overlap of projects with other centers and laboratories. We recommend that NIE systematically review and evaluate such possible duplications.

*This Center is currently known as the National Center for Research in Vocational Education.

The Panel expressed again its concerns about the opportunities for women and minorities in the staffing of the centers. We acknowledge that these concerns are addressed in both the proposals for training of women and minorities and the affirmative action plan of the Center, but we would further suggest that definite targets and timelines be established so that progress may be monitored by the Center and NIE.

As with most plans, the Panel had some difficulty evaluating some of the procedures proposed and staff qualifications. It should be noted, however, that this Center's plan was more specific in such matters than were most others.

A lengthy discussion took place concerning roles and relationships between the CVE's designation as the National Center for Vocational Education and its support as a Center by NIE. The Panel was assured these are compatible, if not complementary, designations. We suggest, however, that NIE may wish further clarification of this issue.

The Panel also suggested further clarification of the expansion of the Regional Exchange component. There was particular interest in the apparent breadth of this proposal and its relationship with the R&D Exchange. There was concern that there might develop discrete RDx's for a myriad of educational programs (vocational education, handicapped, etc.) rather than a single, coordinated system. Similar concerns were expressed with respect to the dissemination plans.

The Panel recommended that the proposed National Advisory Council be formed to further strengthen the overall direction and development of the Center.

Center for Educational Research at Stanford

The Panel was concerned about the lack of a mission statement in the plan. The legislation calls for a "significant substantive mission. The proposed mission must be an enduring, high priority substantive area approved by NIE. It must be presented as a major national problem area amenable to R&D attack."

The Panel passed the following motion:

> The Panel recognizes the high quality of the Stanford faculty and the educational value of the research they have done and are likely to do. However, Stanford is asking that NIE provide funding for an R&D center which does not have a mission. This is incongruent with the original model of a center, which calls for a mission. Since a basic policy decision is involved, the Panel makes the following recommendations:
>
> 1. That the NIE support the continuation and completion of the projects which Stanford has underway.
>
> 2. That Stanford, if they are interested, be provided support for planning an institutional mission.

If the mission question is settled, the Panel suggests that further amplification of the dissemination strategies be considered. The Panel suggests the establishment of a representative advisory board which would be actively involved in establishing policies for the functioning of the Center.

The Panel commends the Center for proposing the employment of a woman as Associate

Director, but concern about equity was expressed when it was noted that only 3 of 39 staff members proposed for new initiatives were women.

CEMREL

The Panel recommended that NIE work out a long-term institutional relationship with CEMREL, taking into consideration the concerns of the Panel.

The Panel discussion of CEMREL focused mainly on topics associated with its mission, which was judged to be too vague to permit the members to feel that there was a real sense of identity or role. The vastness of CEMREL's area of geographical responsibility, ten States and approximately "28 percent of the Nation's schoolchildren," defies precise definition of regional identity.* The lack of determination of role and function leads to questions in several areas, e.g., governance and identification of and responsiveness to regional needs. There were questions about the procedures for "needs sensing" and identification of program priorities. There were also questions about its purpose. One panel member observed that the organization appeared to be a hybrid between a lab and a center. This "hybridization" points out the need for NIE to clarify the meaning of a mission statement and of regional responsiveness in the original definition of a regional lab.

A different observation, but related concern, was made about the ML Group in terms of the proposed research activities: Should CEMREL go into this area extensively? Would this emphasis carry CEMREL away from a lab toward a mission more appropriate to a center?

There was also concern expressed in regard to EEO/AA concerns, since the plan did not contain a statement addressing this NIE goal.

One final observation was made in relation to the rationale for Aesthetics Education—that it could include an examination of its place in relation to education as a whole and, indeed, as one of the "basic skills."

Wisconsin Research and Development Center for Individualized Instruction *

The Panel voted that WRDCIS was ready for a long-term relationship with NIE and should negotiate this relationship with consideration of the recommendations from the Panel.

The Panel felt that there should be a more effective demonstration of commitment to EEO/AA concerns with respect to females and minorities, and a commitment to parity with classroom teachers in making policy and in carrying out the work of the Center.

We were concerned that issues of dissemination of results had been given insufficient funds by NIE. We suggest that consideration should be given to an increase in Center funding directed at developing and maintaining dissemination activities.

*In relation to CEMREL's interest in seeking clarification and possible expansion of its present borders, it was felt that NIE could play a facilitating role in helping this Lab and SEDL work with the States involved in order to avoid possible ill feelings between labs over the States to be served.

*This Center is currently known as the Wisconsin Research and Development Center for Individualized Schooling.

The Panel had some sense that the Center's earlier history had left it in some danger of being "a collection of projects," and we urge that attention be given, with appropriate support, to issues of coherence and mission.

Center for the Study of Evaluation

The Panel voted to recommend that CSE work out a long-term relationship with NIE, with particular attention to the following points, which the Panel identified as requiring clarification or improvement.

We felt there should be greater utilization of women and minorities, especially at the middle professional and managerial levels.

With reference to the design of the program on evaluation of bilingual education, it was recommended that more attention be given to the available literature of well-known contributors to this area.

The Panel felt that there should be a more explicit formulation of a long-range Center mission and the establishment of sequential priorities. It seems likely that there will be more specificity in plan development as CSE emerges from its present period of transition and consolidates the change of focus in its activities.

Several Panel members stressed, on the basis of their differing experiences, the common point that there is a real need for concrete practical evaluations of school performance, in contrast to long-term theoretical and philosophical analyses of the nature and process of evaluation. It was noted in this connection that both laymen and educational administrators have urgent practical concerns requiring direct answers about educational effectiveness. At the same time, it was observed that some attention should be given to the political, ethical, and epistemological aspects of the evaluation process.

One Panel member had serious reservations about the quality of research conducted at CSE, based in part on an observation of technical deficiencies in their Test Evaluation Books. In light of this concern, careful NIE examination of the issue of research quality is essential.

Far West Laboratory for Educational Research and Development

Recognizing the significant potential of the Far West Lab for service to its region, we recommend to NIE that it establish a long-term institutional relationship with the Lab, concentrating on this service role.

The Panel as a whole was impressed with the Lab's emphasis on "interactive" research, involving the practitioner as an equal partner in the development and execution of research designed to solve his or her problems. We recognize, however, that it will take time to develop this conception of research and to make it work, and we recommend that it be seen as an experiment on a new way of conducting educational R&D. We felt that a good deal may be learned if it is given time and if there is tolerance for its exploratory nature. We hope that attention will be paid to establishing this interactive relationship at the higher levels of policymaking as well as in the classroom.

The Panel was reasonably well impressed with the evidence of a concern for equity in the composition of the staff. We were less impressed by the Board, however, and we urge NIE to press the Board to establish specific goals for increasing its proportion of women and minority members to a position of parity. We also suggest that

the Lab establish a formal system for reviewing its materials and products to ensure that they too reflect a commitment to racial and social equity.

National Center for Higher Education Management Systems

The Panel voted to recommend that the Institute establish a long-term commitment to NCHEMS. In making this recommendation we recognize that NCHEMS is something of a hybrid organization as far as the initial conceptions of R&D centers and educational laboratories are concerned.

The Panel does wish to note several concerns that NIE should consider as it negotiates the long-term commitment with NCHEMS. Our strong endorsement of the work of the Center extends to a deep concern that adequate funds be provided to NCHEMS to aid it in carrying out essential dissemination and training functions. Given the present financial and programmatic restriction facing all higher education institutions, dissemination of NCHEMS products will depend heavily on resources at NCHEMS to undertake necessary distribution and training activities.

The Panel was also concerned about representation in several different dimensions. We applaud the recent progress being made with respect to the representation of women on the Board and the professional staff and urge maintenance and further development of that progress. Current deans and department heads might usefully be more broadly represented on the Board of Directors. Serious consideration needs to be given to Board representation of national organizations representing faculty on individual campuses. The Panel urges NCHEMS to pursue much more actively and successfully the representation of ethnic minorities on its staff, Board, and advisory bodies.

The Panel urges NIE and NCHEMS, given the management systems orientation of the Center's work, to be mindful of the human and judgmental concerns that are of such great importance in managing educational institutions.

With respect to the proposed work in equity research for higher education, we believe it important to be mindful of the extent to which the conceptualization of such research should be undertaken not only as a distinct area of concern but also as one that permeates the entire approach to management and policymaking in higher education. It should, therefore, affect *all* the work at NCHEMS, not just the work bearing directly on equity concerns.

Finally, the Panel wishes to comment on the extent to which the NCHEMS work is the only work we reviewed in labs and centers that touches on higher education broadly defined. While we were pleased to hear of additional coordinative activities, particularly those of the finance and productivity group as well as the voluntary work on research agenda development in which NCHEMS has participated, we urge the Institute to give very careful consideration to the expansion of its presence in the higher education R&D domain.

EMERGING FUNDAMENTAL ISSUES

The process of reviewing the plans of the laboratories and centers brought to light a number of serious, unresolved issues. The Panel intends to focus on these during the course of the year and would like to take this opportunity to bring them to the attention of the Director.

Procurement Policies

It is obvious to the Panel that the methods of procurement used by NIE when contracting for work with the laboratories and centers have significant implications for the way the centers and laboratories are managed internally, for the way research and development efforts are carried out, and for the way NIE monitors the performance of the institutions. It is the feeling of the Panel, at this time, that the program purchase policy has hindered the integration of activities within centers and laboratories. The program purchase policy resulted in a number of different staff people at NIE relating to different project people at the laboratories and centers. NIE staff tended not to relate to the laboratories and centers on an institutional basis, and there seems to have been no "place" at NIE for institutional concerns to be considered. Consequently, the centers and laboratories seem to have suffered from lack of consistent institutional direction from NIE. The Panel is therefore recommending that NIE develop relationships with the laboratories and centers as institutions, not as conglomerates of independent projects. This implies that NIE should also monitor the centers and laboratories on an institutional basis, and the Panel recommends that this monitoring take place at a senior staff level within NIE. Although the Panel is not making specific recommendations for improving contractual arrangements at this time, it will be giving serious attention to this matter in the near future.

Definitions of Laboratories and Centers

According to the NIE solicitation of long-range plans, a defining characteristic of an R&D center is that its research and development activities are focused on a "significant substantive mission area." A defining characteristic of a regional educational laboratory is that it provides service to a circumscribed geographic area. There were a number of cases in which Panel members were unable to distinguish labs and centers according to these characteristics. Some centers are designed around a specific research focus; others are more vague. Some labs seem to engage more in research than in service to a region; and other labs seem to provide services, but not to a clearly defined region. Based on the plans and on discussion with laboratory and center Directors, the roles the laboratories and centers should be playing seem to be ambiguous, and their areas of supposed substantive specialization seem to overlap. This could be due, in part, to NIE's not relating to the centers and laboratories on an institutional and systematic basis. The Panel feels that these definitional questions are basic and plans to address them in the course of its deliberations. Particular attention will be given to issues of overlap among the centers and laboratories in the research and development areas they plan to address and to the relationship of those plans to other work supported by NIE.

Dissemination

A third issue which was raised consistently involves a concern for dissemination. The interests of practitioners are well represented on the Panel, and we have a natural desire to help see that the work done by the labs and centers is carried to the point of benefit for students and schools. We have heard a description of the R&D Exchange; we note a fair amount of attention to making products and reports easily available to users; and we are pleased to see that some of the labs particularly are beginning to stress the need for collaboration with practitioners in the design and conduct of research

itself. But we think there are deeper issues in the questions of what is useful to practitioners and of how such products or knowledge can be made available so that they will in fact be adapted and used. We think that the labs especially have a central responsibility to be experimenting with ways of mediating between research and practice, but there are some inherent difficulties involved for an institution located in one place which is trying to be of direct help to perhaps hundreds of school districts spread over a number of States. We will want to return to these problems through the rest of this year and to ask the Institute and the centers and laboratories to help us think about possible answers. Clearly, there will be no single, simple, or immediate solution; but we suspect that these questions will be central to our task and that we will want to urge the Institute to engage in some institutional experimentation as part of its response to the concern.

CONCLUSIONS

The Panel members are pleased to be able to submit these interim recommendations to the Director. We have stressed here the limitations on our time and the tentative nature of what we have said; but we also have benefited from having to plunge so quickly into this task. Having to make judgments now has alerted us to the complexity and seriousness of the questions we will have to address in the final report. Our rapid immersion in the 17 plans has given us a sense of the laboratories and centers and the scope of their work which might otherwise have taken us months to acquire. Our exposure to the NIE and center and laboratory staffs has left us feeling that, even though some of the earlier history still hurts, there is a willingness to set that aside and to work out a more reasonable and stable basis for future relationships.

Our basic recommendation is that such relationships *should* be worked out. The laboratories and centers, with varying strengths and differing roles, have been carrying out some serious and useful work. They have the potential for greater contribution if careful attention can be paid to working out the nature of their missions in a coherent fashion and to providing a context in which there is some security about their institutional existence, at least for a reasonable time.

We will now turn to a more careful consideration of the broader questions about the kind of network of institutions and resources which would constitute an effective educational R&D system for this country and to the role that NIE and these labs and centers might play in building that system. We will also turn to a closer look (including visits by teams from the Panel) at each of the labs and centers. We will try to make more detailed judgments about questions of mission and about plans for particular programs, though on the latter we recognize the limitations on our time and capacity to make detailed technical recommendations. We reserve the right to make other interim and supplementary recommendations as we go along. We look forward to our continuing associations with the Director and her staff, and we would welcome their comments on this first product of our efforts.

Respectfully submitted,

John Crew,
Chairperson
Fritz Mosher,
Vice-Chairperson
Harriet Adair
Anne Anastasi
Helen Bain
Patrick Daly
Sandra Feldman
Lovelia Flournoy
Norman Francis
Calvin Frazier
Hendrik Gideonse
Norma Hernandez
Philip Jackson
Carol Kimmel
Ruth Mancuso

Appendix C: The Panel's Site Visit Reports

THE CENTERS

CENTER FOR EDUCATIONAL POLICY AND MANAGEMENT

University of Oregon
Eugene, Oregon

Institutional Definition and Mission

The site visit team was impressed, as the Panel had been earlier, that the Center for Educational Policy and Management's (CEPM) stated mission, "to advance the theory and practice of educational administration," is one that would justify the kind of commitment from NIE implied by the notion of a long-term institutional relationship. We noted, however, a discrepancy between the ideal set of activities and concerns of a center that would exercise national leadership in the study of educational administration and the actual set of programs constituting the content of the technical proposals to NIE.

As we suggest below, those programs of research might be worthy and interesting in themselves, and they at least have to do with aspects of educational administration and policy; but they represent a special perspective on these topics. We felt that CEPM had started from the particular strengths of its staff and from the emphases that had characterized it during the "program purchase" period; and we felt that the group was thus working backwards and stretching to subsume the field from that narrower base. We found that the Center's leadership agreed with this observation. They were aware of the need for reaching out to involve people with other perspectives and people from other disciplines in the work of the Center.

We think that the Center has a way to go before it can become a national leader in the field of educational administration. If this is a goal, we urge that NIE and the Center work together to broaden its scope. The Center particularly needs to take a broader look at management questions and perhaps at pressing issues in the area of collective bargaining. The new National Advisory Group seems to us to be a useful beginning in this direction, but the staff should give further thought to making sure members of the field would recognize it as a reasonable reflection of the range of their interests. A more systematic program of visiting scholars and practitioners might significantly boost the broadening of the Center's scope; this will be possible if sufficient resources are provided. We noted that among those we have visited, this Center is unique in having responsibility for the university's teaching and service programs in its field, although these aspects of its work are funded from sources other than NIE. We suggest that those activities can be advantageous to the Center's research in that they help keep it in touch with the needs of the field and provide settings in which the research can be carried out. The Center seems to have a significant and respected position in its relationship to the Oregon State educational system. Given the continuing importance of States in American education, that relationship should offer the Center opportunities to carry out work of great practical significance.

Institutional Governance Accountability, and Self-Evaluation

The Center is one of three divisions of the university's College of Education. The others are the Division of Teacher Education and the Division of Developmental Studies and Services. The Center's Director is an Associate Dean of the college, reporting through the Dean to the Provost of the university and to its general governance structure. We met with Provost Olum and Dean Gilberts and found them both to be highly supportive of the Center. They seemed to be in reasonably close contact with the Center's leadership, although they both indicated that it is their practice to give such units a great deal of freedom, intervening mainly only when there are problems—and they saw no problems at the Center. The Dean and the Provost are involved in key staffing decisions of the Center.

The Center has a new National Advisory Group, which has met just once, in the spring. The report of that meeting indicated that the group had taken an active interest in the Center's work and had made a number of suggestions that the Center has begun to heed. We think that the Center should take further steps to define the role of the Advisory Group, providing for regular and reasonably frequent meetings, and that CEPM and NIE should agree on the extent to which the group should be treated as a quasi-governing body, at least for the direction of the Center's research efforts. Further thought should be given to broadening the representation of administrators in the group's membership.

We did not have as much time as we would have liked to explore the ways in which the Center manages its own self-evaluation. The Director and Associate Director indicated that they maintain a chart showing all the required deadlines and milestones and that they keep track of the progress toward them for all projects. We have the impression that this is carried out rather informally, with the project directors retaining a great deal of autonomy unless there are serious problems. This informal, collegial style might be completely appropriate for a small academic organization; we would only urge that vigilance be maintained to make sure it remains adequate to whatever increasing demands are placed on the Center. The Center's staff indicated that in the past there had been some failure to notify NIE and other funding sources when they knew they would be late in meeting their targets. They felt that in recent months, that situation had been remedied both by their own actions and by the fact that they now had a person to notify—their monitor—who actually seemed to care about hearing from them.

The Institution's Activities and Projects and Their Impact and Usefulness

The research work of the Center supported by NIE is now divided into four programs, each representing a relatively new start. These use the support provided under the 18-month grant for planning and first phase work.

Program A is concerned with finding ways to help schools shift toward a style of management and governance to involve students in those processes in a deep and real way—"Making the School Everybody's House." The research strategy involves finding and studying schools that have already moved in that direction. It also

applies the organizational development techniques developed by Philip Runkel and Richard Schmuck to help other schools shift to participatory management. The results of the initial work would be taken to other schools by other teams. Researchers would compare the climate and outcomes of schools that have made these changes with more traditional ones. The study is concerned with important questions about how schools are managed and about the consequences of such differences for student outcomes; in that regard, it would clearly be of interest to administrators. Also, if it focused on the techniques through which assistance for change is provided, the study could offer some useful lessons about the administration of change. In the long run those lessons could expand administrators' conceptions of what is possible, practical, and right to do. In those regards; the study would be relevant to educational administration. We felt, however, that it focuses on much broader issues and that it would be hard, and probably inappropriate, to try to limit it to the administrative aspects of the problems.

Program B explores the value of conceiving what happens in school in terms of the categories of adult work. It examines several questions. Both historically and in the present, to what extent have we conceived of what children do in school as work, and how have those conceptions affected what we actually do--that is, how we organize schooling, curriculums, the classroom, homework, and so on? To what extent do such conceptions vary over time, over schools, or over significant groupings of pupils (that is, according to social class, race, rural-urban, and so forth)? What effects do such variations have on student outcomes and adult work habits and attitudes? This study clearly is fundamental and long-term in its ambitions. We found the description we received of it during our visit quite interesting and promising; we were impressed by the sophistication of this program's approach.

The research staff seem to recognize that from the start there will be very difficult problems in the selection of variables to be observed. They also apparently realize that the long-term hope of looking at the effects of actual variations on student outcomes raises equally difficult questions and is ambitious. If the staff take care, however, their study could be valuable, for it could add some empirical rigor to what has until now been a field of study filled mainly with opinion and rhetoric. The long-term results could cast considerable light for administrators on the underlying conceptions that guide their approach to their work. We would suggest again, however, that this program is only tangentially relevant to the study of administration.

We did not get a chance to consider Program C in any detail, since the principal investigator was away. It is concerned with a comparative study of the ways in which school administrators and other local Government administrators deal with situations of conflict. It also deals with the extent to which the approaches of these officials are influenced by their professional training and their conceptions of their roles (including their perception of the relative importance of their expertise and their obligation to reflect in their decisions) the interests of significant constituencies. We sense that a good many questions of design are still to be worked out here. The study could be interesting, though, and it is clearly concerned with the study of managers operating in particularly trying situations.

Program D represents an attempt at synthesizing the Center's approach and experience. This is to be applied to a particular administrative issue—the question of equity and the blocks to equity—in the representation of women in administrative positions in education. The idea of focusing the effort at synthesis on one specific issue was affirmed by the National Advisory Group, and we agree that it is a sensible suggestion. The Center has a comparative advantage in this area because of its earlier experience in the Sex Equity in Educational Leadership (SEEL) Project. Although the current program seemed to be very new, its intention appears to be to look deeply at inequities in this field and at alternative explanations of them.

We had a chance to learn something of the Educational Resources Information Center (ERIC) program housed at the Center and of the non-NIE funded projects. We were impressed that ERIC Clearinghouse on Educational Management seems well run and that it offers a significant resource for a Center trying to play a national role in this field. We met with representatives from the State Department of Education who told us of their hopes that the Center could work with them on problems of evaluating P.L. 94-142 and implementations of the State's evaluation-competence program. The State Department seems to hold the Center in high regard, and these initiatives offer considerable promise for broadening the scope of the Center's work, as do the activities of the Field Training and Service Bureau. The SEEL project impressed us as being energetic and effective. We learned that the Spencer Foundation had decided to support a continuing analysis of the data gathered under the Center's Management Implications of Team Teaching (MITT) Project; this was an encouraging vote of confidence.

Personnel Management and Affirmative Action

Early in our visit we expressed some concern about the affirmative action effort at the Center, particularly in the area of representation of minority scholars and students. We spent a good deal of time discussing with Center staff and university personnel the difficulties of recruiting and retaining minority persons in Eugene. By the end of the visit, we had concluded that they are making a serious effort in good faith. We did suggest that the Center might use visiting scholars and other such short-term mechanisms more aggressively to broaden the Center's exposure to minority points of view; that might, in turn, help with recruitment of staff and students. We hope that NIE might consider funding such an increase in diversity at the Center, as well as supporting an increase in the Center's substantive diversity.

We noted that there are some of the usual difficulties caused by the distinction between the Center's scholars who are on the teaching and tenure-track lines and those "research associates." We learned that the university is moving to establish greater equity between the status of the two tracks. It is bringing salaries and benefits generally in line and setting up research associate and senior research associate categories to offer more room for advancement and better incentives. These steps seem promising.

Financial Management

We felt that the financial management arrangements are rather typical of a university-based center. The Center has its own finance officer. The university provides monthly printouts by program on the relationship between

expenditures and budget. These go to the Center's Directors. They pass the information on to project directors only if problems appear likely; but the Center's programs thus far involve mainly salary support, and there seems to be little room for surprises. If the size and complexity were to increase, a need for a more rigorous system might arise.

General Comments and Summary

CEPM has the potential for a long-term institutional relationship as a national research center concerned with educational administration. We think making that potential a reality will involve a good deal of work performed mutually by CEPM and NIE. This will have to focus on broadening CEPM's scope and staff to include a wider range of those concerns normally implied by the term educational administration. We stress particularly the composition and role of the National Advisory Group and the need for resources to bring in visiting scholars and others. We urge the Center's leadership to be more aggressive in considering and selling its advantages and other resources (its position in Oregon, for instance) and in reaching out to other disciplines on its own campus. We were impressed that the relationship with the NIE monitor was working out well, forming a basis for mutual trust and constructive criticism. In a discussion of earlier problems the Center has had with continual turnover of NIE staff and the consequent need both reeducate that staff and to respond to new signals, the NIE monitor made a powerful point that deserves recording here. She said that one way to deal with turnover is to make sure that the written record of understanding and intentions is complete—a memory that survives the changes of personnel. Turnover might be reduced, but it can never be eliminated; so to compensate, other devices must be found.

We think that the kind of constructive effort still needed to consolidate CEPM's role of leadership in educational administration can best be carried on in the context of reasonable financial security. We would think that long-term support should be provided for both the research programs on which agreement has been reached and the kinds of efforts that would help broaden the Center's scope.

CENTER FOR EDUCATIONAL RESEARCH AT STANFORD

Stanford University
Palo Alto, California

Institutional Definition and Mission

The most important fact to keep in mind when trying to understand the Center for Educational Research at Stanford (CERAS) as it operates today and as it will probably continue to operate in the near future is that the organization is in a state of transition from one definition of its fundamental mission to another. This transitional condition helps account for some of the uncertainty and ambiguity evident in the

current workings of the Center. However, it also doubtlessly contributes to the spirit of optimism and intellectual excitement that the Panel team clearly perceived.

The emerging definition of the Center's mission focuses broadly on problems of educational finance and governance. This choice of a programmatic focus makes good sense in a number of ways. First, it is obviously designed to take advantage of the unique and outstanding intellectual resources presently residing in the faculties of Stanford and nearby sister institutions. The Panel agrees that these diverse talents constitute an important national resource that has the potential of being mobilized for solving important educational problems. It would encourage expanding the Center's present policy of involving faculty members from other institutions in its plans and future operations.

Second, the choice of finance and governance as the new mission of the Center is also consonant with NIE's mandated concern with these topics. It is particularly in accord with NIE's increased interest in questions of equity as they bear on issues of finance and governance within the schools. The Panel is particularly pleased by the Center's evident effort to be responsive to suggestions made by NIE and its institutional monitor.

Third, questions about the finance and governance of our schools are obviously at the forefront of our Nation's thoughts, as evidenced most recently by the furor and upset the victory of Proposition 13 in California has occasioned. Thus, the Center's newly developing mission is as timely in a national sense as it is propitious in intellectual and institutional terms.

The Panel applauds the efforts of the Center to chart a new direction that is so responsive to the many forces, both internal and external, acting upon it. We realize that the outcome of these efforts is not yet fully clear, a fact that keeps our optimism guarded and our enthusiasm restrained. At the same time we urge NIE to offer all the support it can to this planning effort. If fully successful, it promises to become one of our Nation's most important centers for the study of educational finance and governance. That prospect makes CERAS worthy of great care and nurturance.

Institutional Governance, Accountability, and Self-Evaluation

As an organizational structure, the Center is a research arm of the School of Education and, therefore, is subject to university regulations.

Currently, the Associate Dean of the School of Education is also the Director of the Center and reports to the Dean, who is ultimately responsible to the Provost for the activities of the Center. A Committee on Educational Research, appointed by the Dean, establishes policy for the Center.

The mission of the Center is in the process of becoming "Educational Finance and Governance." That focal project has a Director and Associate Director, who, along with the six coordinators of the programs, make up a steering committee which is the policymaking body for the project's substantive research issues. The Director of the Center is an ex officio member of this committee.

Recommendations of a proposed National Advisory Committee will assist the internal

governance of the Center. The governance, although different from that of other centers, seems well suited to the Project Director, the Director of the Center, and the Dean of the School of Education.

When the transition period is completed and the project becomes more stable, the administrative structure of the Center will probably need to be reviewed. The administration may then have to be brought more in line with the focus of the Center's mission.

The Institution's Activities and Projects and Their Impact and Usefulness

During this period of transition a reallocation of the Center's resources has been occurring. Two existing projects, the Project on Teaching and Linguistic Pluralism and the Project on Teaching Effectiveness, are being brought to completion.

In response to the redirection of its mission, CERAS has proposed to NIE six research components under the general rubric of Finance and Governance in Education. These components have been identified as an initial collaborative effort to address an educational issue of national import through an interdisciplinary approach. The new components, which form the core of the Center's programs, are presently at various stages of planning and development. CERAS will complete a planning document for at least one component in late Fall; others are in the early stages of conceptualization and planning. As the six component coordinators plan further, it is anticipated that they may identify other initiatives related to finance and governance in education and incorporate them into the program's core.

During our discussions on program focus, personnel noted that component coordinators have been responsive to suggestions for modification and improvement made by NIE and proposal reviewers. For example, CERAS has taken steps to add persons with expertise in law to the staff of the Equity component. It has also taken steps in the Politics and Planning component to obtain a more equitable balance between domestic and international problems.

The Center's administration and members of the Steering Committee expect that research activities of CERAS will focus more and more directly on finance and governance. As the various research components refine their plans, they will clarify the parameters outlining the area of focus for each component. Following normative evaluations from peer reviewers and through the institutional monitor, the CERAS administration and NIE can at these critical points provide support, encouragement, and direction to further development of the research components and of CERAS.

Personnel Management and Affirmative Action

CERAS, as an integral part of the School of Education and under the Center's Director, is subject to the employment policies, personnel management structure, and affirmative action plan of the university. The affirmative action process is subject to annual review under the university's affirmative action plan. The Center is clearly committed to an aggressive affirmative action posture, though it is now difficult to implement, for this is a period of declining employment in the university. A woman, subject to confirmation by the faculty, has just been appointed assistant to the Director. The total staff

at CERAS and in the School of Education, respectively, reflect a 32 percent and 21 percent employment of minorities (black, Hispanic, and female). The entire 10-person secretarial staff is female. There seem to be four specific areas where CERAS should consider further implementing affirmative action efforts:

1. in recruitment for admission to Graduate School;
2. in the appointment of top level administrators, project directors, and coordinators;
3. in the recruitment and selection of researchers, consultants, and members of the National Advisory Committee; and
4. in NIE and/or university support for a training component related to identification, training, and interning of minority persons for upward movement toward positions of leadership in research.

Generally, professional personnel hold positions in more than one school of the university while maintaining a relationship with CERAS. The emphasis on decisionmaking through a collegial strategy characterizes the general style of management. It is not the typical hierarchical management at the middle level, but it appears workable given the strengths and temperaments of the staff and the Center Director. The latter is responsible for making final decisions for the Center and, as Associate Dean, conveys to the Dean of the School of Education and the university Provost a working knowledge of the Center's programs.

Financial Management

The financial management of the $1.2 million allocation for the 18-month period seems well organized. Fiscal responsibility resides in the office of the Associate Dean of Business Affairs. Proposed project allocations and expenditures are reported to and approved by the coordinators, the project director and the Center Director. The internal fiscal process of the Center supplements on a timely basis the regular fiscal management procedures of the university.

The university appropriation of $150,000 for general purposes, as well as additional funds for the maintenance of the facility, is evidence of the university's fiscal commitment to the Center.

In view of the substantial sum allocated to planning over the next 18-month period, we suggest a budget review upon the completion of the revised proposals and project timetables.

General Comments and Summary

The Center Director, the project directors, and the institutional monitor have established an effective working relationship. This is strengthened by the obvious respect of the Center staff for the monitor's background in Finance and Governance and by the quality of the NIE Team formed by the monitor to assist in the review and evaluation of the CERAS proposal. This good relationship clearly contributed to the recommendations of the monitor, his team, and peer reviewers of their proposals of April 1978. The Director several times volunteered praise for the monitor's constructive contributions and his aid on a variety of problems.

We urge a continued development of the monitor's relationship to this Center and strongly suggest that the monitor be provided adequate time and support for reviewing the development of plans and final implementation of

the Center's proposal. This may be particularly necessary during the crucial period of transition and because of the extent of the project, the incorporation of other Bay Area experts, and the collegial decisionmaking structure.

Because CERAS is only a few months along in its new planning effort, it seems premature to conclude the Panel's reports with any recommendation about the establishment of a long-term institutional relationship between CERAS and NIE. At the same time we do not wish to remain silent on this important question for fear that our silence might be interpreted as a lack of enthusiasm over what CERAS is presently doing and as a tacit skepticism about its future. Our overall impressions belie any such interpretation. On the contrary, we leave our visit impressed by what we have learned about the new direction being taken by CERAS. Given good will and hard work on all sides, there should be no question that the outcome of the current planning activity will merit a long-term institutional relationship.

This period of transition is an extremely difficult one for the staff of the Center and the faculty of the school. The full involvement of all concerned, who were encouraged and guided through hours of discussion by the Center Director, obviously contributed to making possible a fundamental change of mission with minimal disruption of work already in progress and projects moving towards conclusion.

CENTER FOR SOCIAL ORGANIZATION OF SCHOOLS

The Johns Hopkins University
Baltimore, Maryland

Institutional Definition and Mission

The team was impressed that the Center for the Social Organization of Schools (CSOS) definition of its mission--to study the relationships between variations in school social organization and the outcomes of schooling for students—does in fact provide a coherent basis for organizing its work. The two lines of basic research-interest concentrate on the relationship between school variables and fairly immediate educational outcomes (The School Organization Program) and more long-term outcomes (Career Processes). The other two substantive programs represent particular applications of the more basic work in the areas of desegregation and delinquency. It would seem that no other comparable concentrations of scholars are working on these dimensions of the study of schools—dimensions whose importance for our understanding of schooling are clearly comparable to, say, the psychology of learning. If this is in fact the case, it is certainly reasonable for the National Institute of Education to nurture a special capacity to address issues from this perspective.

The work on desegregation provides a good example. If those people focusing on the basic issues of school social organization were not

there, the CSOS would not have had the credibility to offer work on desegregation. Since that group was there, NIE sought it out for this additional job. The investment in a more basic capacity thus had a practical payoff about which NIE seems to have been enthusiastic, and it suggests one way in which an institutional relationship might benefit both parties in the relationship.

But the example also raises some issues that the Panel and NIE might want to consider further. The Center stresses that its basic work had an important bearing on its capacity for more applied work. The group wants to maintain that basic work and to plan for its development over a reasonable period. One example was a follow-up survey of a group of students originally examined in an Educational Testing Service longitudinal study. This survey will be ready for the field 2 years or so from now. The Center's staff are interested in the desegregation questions but would not want their work on them to supersede their other projects. They would also not be enthusiastic about taking on other major practical studies unsuited to their interests and skills.

The team has suggested that the institutional relationship with NIE offers a basis for CSOS staff to have a special capacity for advice and planning in an area of obvious substantive importance to the Institute and that this provides part of the basis for justifying such a special relationship. The Center's staff indicated some interest in the possibility of their helping NIE with high-level planning in their areas of competence. However, they expressed some reluctance about acting as a kind of extended staff for NIE, particularly on more mundane, short-turnaround tasks, even if NIE were to fund some excess capacity for meeting such requests. University officials also clearly indicated their unwillingness to accept a relationship in which the results of work—presumably including their advice—could not be made available to the public in the manner that scholarly work normally is.

The team suggests that these tensions are probably inherent in the Institute-university center relationship. While they would not be insuperable were they treated with sensitivity and flexibility, they cannot be ignored.

The team was impressed with the strength and coherence of the Center's approach, and we think a long-term commitment is justified. As a possible model for the Panel's recommendations in comparable situations, we suggest that the commitment be in terms of anticipated resources and priorities. However, we suggest that there be an annual "institutional" review of the programs and budget, holding the possibility of reallocation within the anticipated total.*

We assume that the Center might develop or NIE might suggest new ideas and programs whose funding requirements could not be anticipated so far in advance, and that the Center

*With this suggestion, we are trying to begin addressing the more general and more difficult problem of balancing flexibility and accountability in budgeting. The Center would like to operate in terms of a set of accepted general long-term lines of work, and would not want to have to translate these into specific proposals for each year. On the other hand, there has to be a way of justifying particular levels of expenditure, of specifying general expectations for results, and of recognizing when relative priorities and opportunities have changed. Part of the accountability can be satisfied by fairly detailed annual reporting of what has in fact happened, as opposed to proposal writing. But for this annual "institutional" budget review we also mean to suggest a relatively flexible annual process of looking forward and setting expectations whose specific details will have to be negotiated and will probably vary for different institutions.

would want to seek or accept additional funding from NIE or from other sources through the more normal procedures. If the institutional commitment were for 5 years, we would assume that around the 3d year there would be a review of the Center's work and future interests and of NIE's priorities. In this way, there could be reasonably clear signals regarding what might happen beyond the 5 years.

Institutional Governance, Accountability, and Self-Evaluation

The team was pleased to learn of the reactivation of the Center's National Advisory Board. It seems to be a reasonable list, assuming the practitioner members who have been named will be strong and equal participants in the Board's work. We recommended that the Center's leadership set out a formal statement of their expectations about the Board's functions, responsibilities, and the frequency of meetings. Also, we asked how the Board's activities are to be financed.

As an example of the kinds of questions that can be raised about the Board's responsibility, we asked whether the Board would be involved in the choice if the Center should ever change directors. The answer was that the university has the basic responsibility for that, as it does for the appointment of *all* staff. The Center has the same status as a department in the School of Arts and Sciences. The Director is responsible to the Dean of the School and through him to the President and the trustees. Recommendations on a new Director would be made by a regular university search committee, and the appointment would be made by the university. On the other hand, recommendations from the Advisory Board on possible candidates would be welcome. The university, we learned, is also contemplating the creation of a small cross-disciplinary committee to assist in overseeing the Center. We learned that the University treats the Center very much as an academic unit and feels the importance of guarding its academic freedom and autonomy diligently.

We made some additional observations on the issues of accountability and self-evaluation. We felt that the coherence and cross-program membership of the staff, coupled with regular interaction in staff seminars, provide good information mechanisms for internal self-evaluation and monitoring. The team understands that formal evaluation procedures are employed, although we did not review those. The staff members have an impressive team spirit, and there is clearly a good deal of mutual and cross-disciplinary support.

Given the potential policy impact of the kinds of research this Center does, and the intentions to have such an impact, we stress our concern that the Center find ways to inform and involve representatives of the kinds of people potentially affected by policy recommendations. Such participants need not have veto power. Their involvement could, however, ensure that recommendations would be made with as full an understanding of their possible impact as possible and with fair warning to those whose interests might be at stake.

We understood that the normal mechanisms for evaluation of scholarly work by professional peers will be available and useful. We pushed, however, for a further consideration of those additional mechanisms appropriate for a center doing important work with public implications and with a special relationship to a Federal agency. The Center's staff responded positively and with understanding.

The Institution's Activities and Projects and Their Impact and Usefulness

As we said, we are impressed by the significance of this Center's projects and by their potential for influencing educational theory and practice. We urge, as the Panel did before, that the Center keep more constantly in mind and on paper the potential impact of its work and audience for its results—particularly policymakers, such as State and local board members. We are mindful of the Panel's concerns for the dissemination of the Center's work. We found a plan for disseminating the Center's particular approach to team instruction, a product of some of the work on school organization; and the plan seems reasonable as a beginning. The Center should review the dissemination and inservice training components needed for more effective use of the Center's products, and it should fully explore the development of cooperative relationships with regional labs or other institutions better equipped to carry out those functions. Again, since the bulk of the Center's work is likely to have its impact on policy thinking rather than on the creation of products for use in schools, we urge further thought about how such outcomes will be disseminated. Where appropriate, additional thought should be given to ways of bringing the Center's findings to bear on the *pre*service training of teachers and administrators.

Personnel Management and Affirmative Action

The Panel raised a particular question respecting the number of Center staff members who had their roots at Johns Hopkins—the issue of "in-breeding." We found ourselves considerably reassured on that topic. The staff originate from different disciplines and have considerable experience at other institutions; this suggests that they will hardly be single-minded in a negative sense. In addition, in recruiting for a new position (in the desegregation program) the Center is making a special effort to look outside Johns Hopkins. That effort seems to characterize the group's future intentions. The Panel had expressed a particular worry that there would be a negative interaction between in-breeding and staff stability, since universities tend not to give preference for tenure to their own graduates. The majority of the Center's staff members, however, seem not to be oriented toward that type of tenure track or university teaching careers. They are therefore more likely to want to stay and make the Center and its work their careers over a reasonable period. That is, they may do this if conditions of the Center's support and its ability to plan ahead offer some basis for confidence in the (near term) future. This suggests one very important way in which an R&D center might differ from more typical university departments and their modes of recruiting; but it is a difference that might take some special nurturing.

We were impressed by what has been done with the funds NIE has made available for recruiting and training minorities and women. We liked the Center's orientation toward recruiting people with potential to become first-rank scholars in this area. The Center arranges conditions to allow these people to do the work necessary for such advancement. We feel, however, that 1 year is too brief a period to provide the best base for that to happen; the Center's staff agree with us. We commend the Center's intention to find ways of retaining the promising people it has recruited, and we suggest that NIE consider increasing the flexibility of the program to make a longer period more possible.

Financial Management

The financial management of the Center through internal fiscal accounting, program controls, and university fiscal procedures is satisfactory.

University contributions of space, services, and some staffing contribute to the Center's fiscal picture. The recommendation for long-term funding would secure the fiscal stability needed for program planning and implementation and for the retention of a highly qualified research staff.

General Comments and Summary

The team was pleased to find that the Center had adequately addressed the concerns raised by the Panel in its review of the CSOS 5-year plan.

We were also pleased to find a number of constructive relationships between the Center and the university, between the Center and its NIE institutional monitor, and among staff members themselves. It should be noted that the *esprit de corps* that we witnessed is sustained despite a shortage of office space. The Provost and the Dean were encouraged to support the Center's plan for physical expansion.

In conclusion, we urge the Center to explore developing relationships with regional educational laboratories so it can address the need to disseminate Center findings more broadly. More important, we urge NIE to enter into a long-term relationship with CSOS. NIE might then benefit more efficiently from the high quality research that the Center can and obviously will provide.

CENTER FOR THE STUDY OF EVALUATION

University of California
Los Angeles, California

Institutional Definition and Mission

The Center for the Study of Evaluation (CSE) defines its mission as "research, development and dissemination in the theory and practice of evaluation, and . . . . the areas of measurement and methodology which support evaluation activity." That mission is carried out through three programs. The first, Evaluation and Decisionmaking, involves both empirical work on the present use of evaluation in schools and school systems and a philosophical and theoretical consideration of the ways evaluation could or *should* be used. The second, Measurement and Methodology, addresses fundamental questions in producing tests or educational measures for assessing the outcomes of, and progress in, instruction and in developing and applying models of data analysis and evaluation design for educational programs and problems. The third, the Bilingual Evaluation Program, applies the lessons of the other two programs to the approaches and materials for making adequate evaluations

of bilingual programs. In addition, the Center evaluates a small number of programs, supported by the State of California and other agencies, which give the staff important practical experience and access to data. The Center is also actively seeking ways to contribute to the recruitment and training of minorities and women in this important field.

The team learned that this conception of the Center's mission represents a reformulation of its orientation developed by CSE's new leadership over the last couple of years. The original orientation was based on a particular conception of measurement and evaluation and concerned with the development and dissemination of measures and models that fit that conception. Greater emphasis is now given to basic research and to a more diverse, open, and skeptical consideration of the contesting points of view in measurement and evaluation. The Center is also more willing to examine the value of evaluation itself. Application and dissemination are still important, and CSE would like to be considered a "consumer resource" in the evaluation field. But those services are now to be put in the context of deeper and more diverse basic work and offered with a more objective, less monolithic attitude.

We commend this shift and see the new approach as better balanced and more appropriate for a Center that we assume hopes to set the standard for educational evaluation in this country. We think the concern for better measures and better analytic approaches to assess the outcomes of instruction is particularly important and would in itself justify significant Federal support. We are impressed in addition by the CSE leadership's recognition of the need to strengthen the Center's national position and reputation if it is to have a significant practical impact on these issues and its development of a strategy to accomplish that purpose. Its program includes provision for distinguished visiting scholars representing diverse interests and points of view, annual conferences on important topics, and an aggressive publication, speaking, and dissemination effort. We think these developments are highly promising. We feel that the field of evaluation is badly in need of deep, constructive criticism from sources competent and "inside" enough to be respected and heeded but independent enough to be a force for reform and progress. We think the Center and its conception of its mission offer considerable promise of fulfilling such a role.

Institutional Governance, Accountability, and Self-Evaluation

Formal authority for the existence of CSE derives from its status as a unit of the Graduate School of Education of the University of California at Los Angeles. The head of the Center is the Director, who is also a member of the Graduate School's faculty. The Director reports directly to the Dean of the School of Education. The various project directors report to the Director through the Associate Director. Project directors are either senior staff of the Center itself or "faculty associates" holding joint faculty and Center appointments.

A newly created Advisory Board to the Director advises on matters of policy in the areas of evaluation and measurement. The Advisory Board is composed of experts in the field of evaluation and representatives of appropriate constituency groups of the Center, such as educational practitioners. The representatives are

selected nationally to achieve a balance among various parts of the country. The Board has not met sufficiently at this time for the visiting team to be able to comment on its activities and its relationship with the Director and with the Faculty Advisory Board or the Dean.

The Faculty Advisory Board, composed of Education Department members appointed by the Dean of the School, advises the Dean about administrative and policy matters and clarification of CSE's mission. The Board also consults with the Director as needed.

The Faculty Board plays a major role in determining policy and priority needs. The recent history of the relation between the Faculty Board and the Center's administration has been one of cooperation, especially as demonstrated by the degree of involvement of faculty associates and faculty affiliates. Given the strong role the Faculty Advisory Board has played in the past, it is conceivable that in the future there could be some conflict between its advice and that of the independent National Advisory Board, but with good management, we see no reason why that need be the case.

A wide range of people are involved in identifying problem areas and issues to be studied, including Center administration, project staff, school administrators, teachers, parents, students, and other appropriate constituent groups. In the past, the process of needs sensing has been one of continuing dialog with project constituents but not of looking holistically at the issues of evaluation. We anticipate that the Center will take a more comprehensive approach to identifying needs after the creation of the National Advisory Board.

The Institution's Activities and Projects and Their Impact and Usefulness

CSE's programs and projects are well defined. The site visit team believes that the programs, as well as the individual projects that make them up, will in both the short and the long term have impact and usefulness. The programs cover a range of what could be called theoretical research (basic inquiry) and immediate development of practical applications.

Evaluation and Decisionmaking The Center recognizes that the formal evaluation movement in this country is only a little over 10 years old; yet that movement has already left a fairly confusing trail of theory and development that badly needs to be sorted out and understood. Under this program, research has begun to study evaluation and decisionmaking at the school district level and at the program level, and to make philosophical inquiry into educational evaluation.

Measurement and Methodology This program has four projects: Design and Use of Tests, Multilevel Analysis, Psychometric Problems, and Reanalysis of Large-Scale Data Sets. The team believes that the study of these areas in a systematic manner, as CSE is doing is both timely and appropriate. The team recognized that studies in the areas of psychometrics and the statistical analysis of test data used by school systems have in the past several decades been rather fragmented. We feel that the current controversy over norm-referenced tests, criterion-referenced tests, competency tests, and proficiency tests needs to be mediated through long-term study of the sort the Center proposes to undertake. At least one team member sees the

possibility of finding new means in the application of formal education to the study of large-scale data sets. These studies may lead to reinterpretation of highly publicized reports that have indicated, for example, that schooling does not make a difference in learning.

Bilingual Evaluation Program The projects under this program include a Bilingual Prediction Study, Bilingual Evaluation Technical Assistance, Women & Minorities Evaluation Training, and SOBER-Español. The bilingual prediction will undoubtedly be very useful if it can be researched and demonstrated, though the study's design may have been too narrowly defined by the original NIE solicitation. Technical assistance in bilingual evaluation is having the immediate effect of giving bilingual programs some structure. The team believes that this project should be coordinated more extensively with efforts in the laboratory system. The SOBER-Español program has a potential to make more clearly defined curriculum objectives and the development of test items. This project in its present form could serve as a guide and should be disseminated.

Evaluation and Audit Applications Only part of the funds for this program of evaluations comes from NIE. However, it complements the other programs described and appears to reinforce the activities included in the mission of CSE.

Other parts of CSE's current activities that we felt were useful were those of Field Services and Dissemination. The team could see that the development of workshops, field testing, and dissemination has had a significant audience (over 1,300 participants) and that the Center is making major contributions to the programs of the American Educational Research Association. The Center tries to tie in to the national R&D dissemination networks.

The program leadership of CSE looks dynamic at the administrative level. The staff, too, appeared to be well qualified. Active faculty participation and ongoing involvement of highly recognized visiting scholars in the fields of measurement and methodology further strengthen the programs.

Personnel Management and Affirmative Action

The overall management of the Center is efficient, particularly in the selection and management of personnel. The staff seem to be competent, and although in some respects they are inexperienced, their association with faculty associates, faculty affiliates, and visiting scholars helps to give depth to their contributions.

We noticed a lack of minority personnel and staff representation at all levels of administration and implementation except the clerical level. In discussing this situation, the Director and Associate Director described the Center's efforts to locate minority personnel for various positions. Among the factors they cited as impeding their success were the relative stability of the present project staff; the lack of trained minority group members to fill positions that are or might appear to applicants to be technical; the high cost of living in the Los Angeles area in relation to the present salary structure; competing opportunities available to qualified candidates; and the interaction between the Center's administration, recruitment, and employment procedures and established Education Department priorities and requirements for Center-affiliated faculty positions. Possible alternative procedures for advertising for and recruiting minority staff were discussed, as was the possibility of establishing intern positions for people who could work in these career ladder

positions to enhance skills to qualify for faculty and/or senior staff posts.

Financial Management

We met both with the university contracts and grants officer and with the Center's own fiscal and budget staff, and we are satisfied that the provisions for control and timely feedback of budget and expenditure information are acceptable and efficient. At this point, the university's contribution is limited to the Director's salary and some other staff support; nevertheless, we felt that the university officials understood the Center's program and were strongly supportive of it. The Center helps the university by advising the medical school and other schools on evaluation and working with the undergraduate writing program on measurement questions, among other tasks. The rest of the university community seems to appreciate it as a resource.

The Center is considering the possibility of moving out of the School of Education to become an autonomous "Organized Research Unit," in the university's parlance. It would then report directly to the UCLA Chancellor. That move would make the Center eligible for at least some university program support, but it might involve disadvantages as well, and the matter was clearly still in debate. We cannot pretend to judge the pros and cons, but we suggest caution in consideration of the important advantages its close association with the UCLA Graduate School of Education gives the Center.

General Comments and Summary

The team reaffirms the Panel's earlier judgment that NIE and the Center should move quickly toward establishing a long-term institutional relationship. We are reassured, as we indicate above, about the questions we had raised earlier on the institution's mission. In fact, we see it as having considerable coherence and dealing with a topic of the highest importance in educational research. The staff seemed to be highly competent and energetic, and the leadership's vision of what the Center can become is particularly impressive. There is now an opportunity to begin to realize that vision in the current opening for a professorial appointment in the School of Education, which seems likely to be filled by a distinguished candidate whose field is relevant to the Center's interests.

The current relationship with NIE seems to be proceeding reasonably well. We suggest that in the move away from program purchase to institutional support a good deal more attention be given to finding the appropriate balance between the general agreement on directions with loose substantive control appropriate to support of basic research and the closer agreement and monitoring that may be required when more specific products are expected. We suspect that for much of the Center's work the balance should lean in the first direction.

We paid a good deal of attention to the question of dissemination of the Center's ideas and products. Their efforts in producing training materials and backing them up with workshops and other support seemed to us to be particularly useful. We found that they can receive only limited income either from training and the sale of their own publications or from the products they have turned over to commercial publishers. We don't pretend to understand all the issues

involved in this area, but we sense that Federal policy in these matters is somewhat confused and confusing. We hope that NIE can work with CSE and the other institutions to develop a more effective approach.

We pursued the question raised earlier about the quality of the Center's test evaluation work and were satisfied that they had taken steps to seek review by outside experts before proceeding with the dissemination of that work.

LEARNING RESEARCH AND DEVELOPMENT CENTER

University of Pittsburgh
Pittsburgh, Pennsylvania

Institutional Definition and Mission

The Learning Research and Development Center (LRDC) has a clearly formulated long-term mission that provides direction and unity for its programs. Essentially, this Center is concerned with what schools can do to adapt to the *diversity* characterizing the population of the United States. The diversity is treated not as a drawback but as a resource. LRDC has pioneered in defining the emerging area of instructional psychology, which bridges the long-standing gap between basic research on the psychology of learning and educational practice.

In terms of NIE priorities, the Center programs fall most clearly under basic skills and equity. This is especially well illustrated by the research on basic knowledge and learning skills in language and communication, mathematics, and science. These studies climb the educational ladder from the elementary to secondary levels. Needs of minority, educationally disadvantaged, and handicapped children are effectively approached through the Center's individualized instructional systems and, more recently, through the design of learning environments to improve motivation, attitudes, and expectations that affect both cognitive and social learning.

Projects are highly interrelated and mutually supportive. Priorities are determined in part by the internal structure of the overall program, with current projects evolving from earlier projects. The Center's research shows long-range vision and long-term planning but also yields immediate spinoffs applicable to classroom teaching. The general plan exhibits a cyclical rhythm, with emphasis alternating between basic research and development (including dissemination). The Center is now moving into a basic research phase, during which the base of knowledge about cognition and learning is being strengthened. This phase will in turn lead to one concentrating on development of innovative instructional products and procedures for classroom teaching. In this regard the Center sees its function as the development of prototypes, rather than massive production and dissemination. However, limited classroom applications are tried out in all stages to test the prototypes in the real world.

Institutional Governance, Accountability, and Self-Evaluation

The team was impressed by the close relationship between the university and LRDC, which gives a sense of stability and permanence to the center, and thus enables it to attract and keep a staff of high quality. The fact that almost all members of the professional staff of the Center also hold faculty appointments in the university helps to ensure the academic excellence of the staff and provides them with the opportunity to interact with students and other members of the academic community.

There is clear evidence that the Codirectors of the Center have access to the highest levels of university administration and enjoy a status similar to that of an academic dean. LRDC's University Coordinating Committee, chaired by the Provost, ensures that important policy questions affecting the Center receive attention from the university's top administrators.

The Codirectors of the Center seem to have developed an administrative style well suited to a first-rate research organization. They remain intellectual leaders in their field while carrying on their administrative responsibilities. Their relationship with their staff and with each other is best described as relaxed and collegial, marked by a high level of mutual respect.

The same collegial attitude seems to characterize the Codirectors' view of NIE and their relationship with it. They appear to share the long-term goals of NIE and are confident about their future relationship with that organization. They also approach the inevitable complexity of the bureaucratic process with an attitude of patience and understanding.

The practice of electing an executive committee to oversee the process of peer review within LRDC is commendable.

The team was impressed by the membership of the Board of Visitors. Though the functioning of that Board is not entirely clear to members of the team, it is evident that it constitutes an enviable resource for professional advice and review. It is also clear that the professional staff of LRDC is in close touch with colleagues in other institutions throughout the country. Contacts with the Reading Research Center at the University of Illinois and the Research Center on Teaching at Michigan State University are to be commended and encouraged.

The Institution's Activities and Projects and Their Impact and Usefulness

Evaluation Research An extensive research unit has the dual objective of developing procedures for evaluating instructional outcomes and investigating the use of research findings in educational decisionmaking. For this purpose, the Center has formulated a model of classroom processes and is actively exploring sophisticated observational paradigms and statistical methodologies for investigating the relationship among three variables: the student, the classroom events, and the educational outcomes. These approaches are being used to assess the effectiveness of instructional procedures developed at LRDC and elsewhere and to compile a longitudinal study of basic skills development.

A distinctive feature of this research is its study of instructional programs as they are actually implemented in classrooms. Another is its

consideration of the values attached to particular educational outcomes by students, teachers, parents, administrators, and other interested groups.

The evaluation unit plans studies at three levels: (1) original analyses of data gathered in LRDC projects, (2) secondary analyses of earlier studies conducted at LRDC and elsewhere, and (3) meta-analyses, involving the integration of data from several studies.

Learning Environments and Social Processes The new focus on learning as a social process and on social processes as both outcomes and mediators of learning moves the Center into a domain of research that calls for both naturalistic and experimental approaches. Studies of the actual classroom experiences of both students and teachers fall into this domain, as do more controlled laboratory studies flowing from recent developments in social attribution theory. The task of integrating or otherwise interrelating these divergent approaches is not yet being addressed directly by the Center staff, for it is evident that this new effort is barely underway. At the same time, the team encourages the staff to begin even now to seek ways of strengthening the linkage between theoretical interests and educational concerns in this emerging research area.

Researchers feel they must know how schools work in "the real world." Therefore they are doing small-scale field testing in various areas:

1. Lab school–using the Center's materials and staff within the Center school site.

2. Follow Through–using the Center's materials and giving technical assistance in 7 school districts (22 school sites). These are federally funded Follow Through programs.

3. The Pittsburgh schools, both inner and suburban–the New Reading System has been field tested in many schools, and data are now available. Efforts are being made to market the material commercially.

Materials and technical assistance are being used to meet the needs of learning disabled students at the secondary level through a Child Service Demonstration Center.

Strategies for sustaining innovative programs in the schools are being studied.

Basic Knowledge and Learning Skills The Language Communication programs within this unit are organized into the study of (1) reading comprehension instruction, (2) the cognitive processes involved in language comprehension, and (3) the acquisition and use of reading comprehension skills. This research will be conducted with students from the elementary, middle, and secondary schools and first-year college students. The research analyzing the instructional materials should be of special interest, since it will study the basal series that are most widely used throughout the country.

The two programs in math and science involve studying the understanding and skills involved in math and science comprehension. They will result in the production of a handbook on problem-solving in science for middle school teachers.

The project on Aptitudes for Learning reflects a currently emerging shift in orientation from the use of tests for prediction to their use as an aid in developing and improving intellectual per-

formance. This shift recognizes the malleability and active development of cognitive processes. The project seeks to explore the nature of performance on tests of "aptitudes," or general cognitive abilities, in terms of the information-processing and cognitive strategies used by different populations. Another aspect deals with expertise in specific areas. This research represents an innovative, forward-looking approach to an area that may lead to the development of effective diagnostic and instructional procedures for remediating cognitive deficiencies.

Personnel Management and Affirmative Action

Staff morale seems high in the Center, a condition due in no small measure to the collegial atmosphere generated by the administrative style and intellectual leadership of the Co-directors. It is also true that the professional staff members are themselves of very high quality, which helps to sustain the mutual respect that is so clearly evident.

The team was impressed by the number of women on the professional staff. We were also convinced that efforts are being made to hire more minorities in those positions, and we were pleased to learn that two black women will be joining the professional staff in the fall. We commend the administration of LRDC and the joint search committees for identifying and attracting such highly qualified people.

Project Impact seems to have the promise of attracting to careers in educational research women and members of minority groups who might not otherwise have considered such careers. These efforts to expand the career awareness of minority students should be continued and, if possible, expanded.

The team was also impressed by the Buhl fellowship program, a way of attracting to educational research members of the academic community from a variety of disciplines who until now have not worked on educational problems. These efforts too should be expanded if possible.

Financial Management

NIE provides approximately 72.5 percent of the funding for the Center. Over $250,000 in unrestricted funds comes from the University of Pittsburgh, amounting to 8.5 percent; and 19 percent comes from other sources.

Although the Center does have an administrative officer, the Codirectors are highly involved in the budget discussion, always aware of the priorities of programing.

The Center does not respond to RFP's or seek other sources of funding unless the funding relates directly to the focus of the projects within its mission.

The Center has excellent physical facilities in a building of its own, which is within the university community.

The Center also can use the university's computer services at no cost. In addition, it has its own computer capabilities.

General Comments and Summary

Overall, the visiting team was highly impressed with LRDC as an institution and felt that the several areas were especially noteworthy.

Relationship with the University The team was pleased with the healthy, initimate, and stabilizing relationship between LRDC and the university. We considered the sizable financial contribution the university provides the Center, and its granting to LRDC a status equivalent to that of a professional school within the university, to be laudable.

Minority Recruitment Efforts LRDC is to be congratulated not only on the sincerity of its minority recruitment efforts, but also on the excellent results of those efforts. Their recruitment efforts respond to community demographics, Center program efforts, and university requirements and have therefore resulted in the hiring of quality minority researchers whose professional services and expertise are valued and in great demand.

Establishing Formal Linkages with Teachers and Consumers The team questioned the absence of teachers and lay people from the Center's Board of Visitors but was satisfied that the Center recognized the need to establish a formal means of gaining input from these sources. We found the Center's involvement with the Urban League's national and local educational research programs to be a commendable step toward establishing such linkages.

Commitment to Mission The team was quite impressed by the Center's commitment to its mission, evidenced by its decision to solicit monies that support its programs instead of designing programs to fit the funding source's priorities.

Institutional Relationship The site team recommends to NIE, as did the Panel in its Interim Report, that it enter into a long-term institutional relationship with LRDC.

NATIONAL CENTER FOR HIGHER EDUCATION MANAGEMENT SYSTEMS

Boulder, Colorado

Institutional Definition and Mission

The National Center for Higher Education Management Systems (NCHEMS) Board states the Center's mission as:

> To carry out research, development, dissemination, and evaluation activities and to serve as a national resource to assist individuals, institutions, agencies and organizations of postsecondary education and state and federal governments in bringing about improvements in planning and management in postsecondary education.

Five organizational programs manifest that mission: planning and financing, productivity, information for management, equity, and dissemination. There are three substantive divisions of the Center—the Division of Management Programs, the Division of Basic Studies,

and the Division of Information Standards and Studies—and each program can overlap two or more of the divisions. The programs aim to develop approaches and solutions to the problems of productivity and equity in postsecondary education, the techniques and information necessary to support those approaches, and dissemination techniques to bring new ideas into widespread use by postsecondary institutions.

The site visit team recognizes that these goals are also central to NIE's mission. NCHEMS is the only institution supported by NIE concerned exclusively with these issues as they relate to postsecondary education. It also seems to be the only such institution in the country that aims to be a national resource for the higher education community, offering it a research-based service for improving management and planning. Therefore, the Center seems to be an obvious candidate for a special, long-term relationship designed to nurture and provide stability for this singular resource. That point already has been recognized by NIE through the existing special relationship between it and the Center, although the nature of that commitment has been thrown into some doubt, as we note below.

Because of the brevity of the site visit, the team is unable to judge definitively the coherence of the Center's realization of its mission in actual programs. We are satisfied that the general mission statement provides clear guidance for the development of programs. The history of the Center shows an interesting evolution from its early heavy concentration on translating the techniques and information requirements of operations research into a coherent package to be applied to higher education, to its more recent recognition that, once having achieved the first translation, it would have to put a great deal more effort into adapting products to the traditions of higher education and "humanizing" them so that they will be more widely accepted and adopted. Inevitably, the particular choices of programs reflect the interests and talents of available staff and Board members, the most strongly felt needs of the constituencies served, targets of opportunity, and the state of development of the field. As a consequence, they are somewhat diverse and not easily described; but within that diversity we did find what seemed to be a serious and alert effort by the Center's management and its Board to maintain a sensible balance between a long-term, cumulative strategy, which builds on past activities, and the need to be responsive to new pressures and priorities.

We note the emphasis in the Center's mission statement on its role as a national resource and its concern for dissemination. We feel that it is crucial in the achievement of this mission that the Center itself have the capacity to reach out to the constituency it is to serve and to offer training and technical assistance in the use of the products they develop. These are not products that can be expected to "take" once reasonable descriptions are made available in publications. The require sophisticated salesmanship and careful support to adapt them to any particular institution's situation. We were dismayed to note the decline in the proportion of the Center's budget devoted to dissemination–from about 40 percent in earlier years to 4 percent more recently. We would like to reemphasize the Panel's earlier concern about the crippling effect of such a reduction on the Center's implementation of its mission. Because of its great importance, we will return to this matter again in our report.

Institutional Governance, Accountability, and Self-Evaluation

Internal governance is handled by the Management Council, made up of the Associate Directors, working in concert with the Executive Director. The Executive Director is himself accountable to the Board of Directors.

The Board is an active policymaking group and comprises three standing committees: the Planning Committee, the Fiscal Affairs and Operations Committee, and the Implementation and Evaluation Committee.

A fourth committee of the Board, the Executive Committee, is made up of the Chairperson of the Board, the Chairperson-Elect, the Chairpersons of the other standing committees, and, ex-officio, the Chairperson of the National Advisory Council. The National Advisory Council is made up of representatives of related organizations and Government agencies.

The Board meets four times a year and the Committees as often as needed. Policy statements can originate within the Board or can be brought to the Board by the staff.

The Board strikes us as being broadly representative of postsecondary education, and it is striving to become even more so. For example, representation of private liberal arts colleges seems to be increasing. The Board appears to take its governance and policy-setting role seriously. Attendance at Board meetings is high, and the majority of the members are actively involved in Board activities. The level of that involvement does create some tension, especially when dealing with questions of the Center's leadership; but the Panel team believes the tension to be both healthy and productive. Indeed, we can assert that an inherent tension is almost bound to emerge in a "special relationship" between an institution and NIE, arising naturally from the pull between NIE's concern to ensure that the relationship serves its priorities and mission and the legal and strongly felt responsibility of the institution's governing body (in this instance, the Board) to set policies and priorities. We see no easy resolution of this tension. Certainly, it cannot be achieved mechanically. More likely it requires the establishment of subtle and dynamic relationships, characterized by a perception of mutual interests and by a spirit of collegiality. It might also require that NIE be prepared from time to time to provide additional funding to ensure that its own priorities do not curtail activities crucial to the institution's self-definition.

The Board is responsible for the accountability of the Center and for the evaluation of the overall program. In its planning efforts, more than 600 participating institutions were asked to suggest future directions. Following this, approximately 30 representatives from that group met at NCHEMS to plan future programs.

In all, the planning procedure seems to be well conceived and executed. Mention of the collaborative effort of the Center and NIE to evaluate the awareness and use of the Center's products appears in a later section of this report.

The Institution's Activities and Projects and Their Impact and Usefulness

The Center's programs are organized into three divisions: Basic Studies, Management Programs, and Information Standards and Studies. We observed that both substantive themes and

individual staff members have roles in more than one of these divisions. We take this to imply a significant opportunity for integration and cross-fertilization of ideas and perspectives.

Basic Studies The Basic Studies Division is generally concerned with finding new approaches to the management and planning problems facing postsecondary education. It initiates the development process that results in products and services in the other divisions. A good part of this division's activity is monitoring basic research going on elsewhere. The goal is to identify ideas that might be picked up and adapted to the Center's mission. The division also houses the Visiting Scholar program, which is designed to bring in outside talent interested in working in areas paralleling the Center's interests. Applicants are those who would welcome the chance to use the Center's facilities and access to data and who could, in turn, offer stimulation and new ideas. This program has limited funding ($15,000 a year) and at present can provide only supplementary help for two or three fellows a year, but the Center would like to increase it. The FY 1979 budget, however, asks for only $20,000 for this purpose.

The division staff carry out a number of basic studies projects of their own. Some are initiated by the staff (with the approval of the Board), some are realized in collaboration with other agencies, and some result from the Center's planning program, which includes a survey of the needs and suggestions of its constituency. Some examples are a study of State fiscal capacity and tax effort by a Center staffer in collaboration with an NIE staffer; development of a model for anticipating the demand for trained nurses, in collaboration with the Western Interstate Commission for Higher Education; a series of profiles of State student aid programs; and some beginning work on techniques of assessing institutional performance and productivity.

The emphasis on basic studies was initiated at the Center in 1972 with a large grant from The Ford Foundation. It lapsed after the grant expired, but the Center's leadership, missing the program's stimulation and observing the drying up of the development pipeline, has sought to reinstate it, placing about 20 percent of the FY 1979 budget request in the basic studies category.

The team applauds the renewed emphasis on basic studies, although we find ourselves uncertain about the rationale for and coherence of the particular projects now being carried out under that label. We urge further attention to these questions in the Center's planning process.

Management Programs The mission of this division is "to produce products that assist planners and managers in carrying out their responsibilities." These products are diverse, ranging from procedures manuals and planning documents to student questionnaires and State-level data sets. Over the years the work of this division has undergone an important change, described by the division director as a move "from hard-wire to software." This means that the division's programs have become increasingly responsive to the need to tailor programs and procedures to fit the specific requirements of particular types of institutions. A good example of that sensitivity to institutional type is the community college impact study, whose goal is to help community colleges determine how well they are serving their various constituencies. Another example is a study aimed at helping particular States (Hawaii and Rhode Island) monitor progress toward their educational goals. It is hoped, of course, that solutions to these

particular problems will also generate techniques and procedures with more general use than their immediate applications.

An important goal of much of the division's work is the reduction of bureaucratic redundancy. Institutions and State and Federal agencies have overlapping needs for data of many sorts. To coordinate those needs so information is quickly and easily shared with minimum redundancy is no easy task. It is but one of the problems this division works on as part of its larger effort to streamline and, where possible, to eliminate bureaucratic machinery.

To be successful, the work of the division requires an intensive effort to disseminate its products beyond the particular clients for whom they were developed. This requires not only the preparation and distribution of printed materials, but also the development of curricular materials that can be used in training sessions for management groups to convey the usefulness of a wide variety of such products. At present, the division does not have the resources to mount this dissemination effort. Also, the institutions whose managers might have the most to gain from such training, such as the 2-year community colleges, are precisely the ones least able to afford the full cost of such services. Clearly, support for such dissemination efforts is badly needed.

Division of Information Standards and Studies The work of this division, which comprises the initial mission of the Center, is divided into four major areas: (1) the development of data standards; (2) the tailoring of those standards to the needs of specific user groups; (3) the translation of data into information that answers specific questions or solves specific problems; and (4) the development of procedures and techniques to analyze and use data more efficiently, thus reducing redundancy and inconsistency.

The ordering of these four areas reflects a developmental shift in emphasis from an earlier concern about uniformity in data collection procedures and language to a recent growing interest in serving the needs of particular types of institutions. This shift, which the Panel team notes with approval, is less a function of an explicit change in policy than a natural outgrowth of the Center's success in developing data collection procedures that today might be said to constitute a widely shared language of postsecondary education. Having largely achieved this earlier goal of convincing institutions that they should employ uniform procedures to collect and code data, the Center is now able to concentrate more of its energies on adapting standardized data to the information needs of specific users. Moreover, it is also in a better position to consider how information collected by the Government and other external agencies can be retrieved and put to use by the institutions that supplied it, a process division members refer to as "reversing the data flow."

Although the establishment of data standards no longer has the priority it once had on the division's agenda, it would be a mistake, staff members point out, to think of that work as completed. Like all languages, the one used to describe the operation of our postsecondary institutions changes as the institutions themselves change and as the analytic power of their managers increases. Consequently, that language must be constantly updated and modified. There is some concern on the part of division staff about the continuance of funds to accomplish these needed revisions.

Concerning the usefulness of the Center's programs and products, we have the impression that the Center's past work on information standards has had a pervasive impact on the way higher education statistics are defined and gathered and, therefore, on every institution of higher education. The Center's current monitoring of HEW's gathering of educational data is another way it continues to affect educational affairs. The Center has developed a base of higher education data that is probably as comprehensive as any that exists. With these data they could, and apparently do on occasion, offer an extremely helpful service in carrying out special analyses or assisting in the development of new indices for a wide constituency of potential users. There are, however, severe limitations on their capacity to offer such services, and we understand that neither NIE nor the National Center for Education Statistics (NCES), which supports much of this aspect of the Center's work, feels in a position to fund services of this sort. We think that such a policy might be shortsighted in placing an artificial limit on the payoff from the investment in the Center.

We heard the preliminary results of the Arthur D. Little evaluation of the impact of five of the Center's products. The basic finding seems to be that about 50 percent of a sample of potential users among higher education institutions knew of at least one of the NCHEMS products, and 25 percent had used at least one. The larger and more complex institutions were more likely to have used the products, with 2-year institutions and private liberal arts colleges being less likely to use or even to know of NCHEMS' work.

These results suggest to us at least two things. First, NCHEMS should, as it would like to, be concerned with adapting its products further for use by smaller, less sophisticated institutions. Second, it is clear that widespread use of these products, most of which are potentially useful to most institutions, will depend on much more extensive dissemination efforts. It would be a pennywise, pound-foolish policy to continue the investment in research and development without protecting it with an expanded investment in dissemination.

Personnel Management and Affirmative Action

Over the years there has been a gradual change in hiring policies within the Center. The initial focus was on the hiring of systems analysts and information specialists; the present staff includes a larger number of professionals with administrative and managerial experience in institutions of higher education.

The Associate Directorships and most other top-level posts are filled by candidates who have been identified and evaluated by both internal and external search committees. The Director appoints all of these; the Board of Directors must approve the appointments of Associate Directors.

The Board is now considering a study, "Administrative Procedures for Salary Administration," which was recently completed by an outside consultant. Equity is of great concern to the Director and the Board.

NCHEMS is keenly aware of the Panel's concern for affirmative action and the need for a larger number of women and minorities on the staff and the Board. Several women have recently been appointed to the Board; the chairperson-elect is a woman.

Recruiting minorities to the staff is difficult. Presumably because of their small representation in the population, many blacks find Boulder an unattractive place to live. Orientals and Hispanics are more numerically available but are often recruited away. Movement of minorities into top-level positions will depend on the attrition of current staff.

The majority of the staff members are relatively young, but apparently capable. Their youth is partly due to the newness of some of the disciplines in which they work and partly because older and more experienced staff leave to take other posts. There is no doubt that the Management Council, the Executive Director, and the Board are all aware of the need for more minorities and women in the organization and will move in this direction.

Financial Management

Because NCHEMS currently receives 63 percent of its operating budget from NIE and because it has a cash reserve of only $250,000, its Board, its Directors, and its chief administrative officers are understandably uneasy about the approaching termination of its present 3-year contract without a clear statement about future intentions and without even a firm budget figure for the final year of that contract. Apparently, an unexpected reduction in the funding the Center expected from NIE a year or so ago necessitated the sudden dismissal of five members of the professional staff, an event that created severe morale problems within the institution. The administration wishes to avoid a repetition of that unfortunate circumstance.

Partially in response to the insecurity created by the uncertainty of future funding from NIE, the Center and its Board are exploring the possibility of soliciting funds from corporate sources.

Though it seems unlikely that such sources will ever be able to supply the kind of financial stability that the Center seeks, the Panel team approves the Center's efforts to augment its current sources of funds.

The fiscal management of the Center appears to receive close scrutiny from the Board's standing committee on fiscal affairs and operations. Budget control and planning are managed by the Associate Director for Corporate and Administrative Services. The salaries of the Director and the Associate Directors are reviewed and approved by the Board.

The Board and administrative officers feel that the Center's financial reserve is exceedingly small compared with the size of its operations and its commitment to staff. Moreover, there is some fear that this amount would not grow at all if NIE changed its funding mechanism from contracts to grants, thus eliminating the management fee, which has been the chief source to date for the accumulation of the Center's reserve. The Panel team agrees that the reserve is insufficient as a buffer against emergencies and a source for exploratory ventures that might open up new funding sources. We would discourage any change in funding policies that would result in the Center's financial position becoming even more precarious.

General Comments and Summary

The team wishes to reemphasize the fact that NCHEMS is the only center doing research and development at the postsecondary level. It is important that its mission be recognized as differing from those of all other laboratories and centers. Individual consideration must therefore

be given to the funding and management of the Center.

As noted above, we are concerned that the Center renew and expand its capacity to provide training and support for the dissemination of its products. The Center's Board considers this issue so important that it is examining the possibility of setting up a subsidiary institution to market the Center's products and offer training and assistance in adopting them, on a fee-for-service basis. They are reasonably certain that the demand would support such an effort. We commend the spirit of that idea, but we question whether establishing a separate organization is wise or necessary. We think that the Internal Revenue Service regulations would permit a nonprofit organization to offer services on a fee basis where the services offered are consistent with its charitable purposes and where the income is devoted to furthering those purposes. The potential separation of the substantive and research workers from the dissemination workers worries us, although we recognize that people differ in their capacities and tastes for these two kinds of work and that balancing their talents within one organization is a significant management problem. We are delighted, as we believe NIE should be, that the products are thought to be sufficiently in demand to meet a market test. But we recognize that establishing such a service operation, which might eventually come close to being self-supporting, will nevertheless require significant support to start, and probably to maintain. We suggest that NIE consider seriously whether providing such funding would not be a very good investment—and, as the market develops, a good opportunity for recognition by an important constituency of work that NIE helped to start.

The dissemination issue raises another problem that also has an effect on the stability of NIE's monitoring function and on the relationship between the two institutions. That problem has to do with the assignment of responsibility for the Center (or any of these institutions) to a particular NIE division. We understand that the decline in the Center's dissemination budget after the new relationship was established occurred because the Center was assigned to Finance and Productivity. That group chose to spend its funds primarily on research and development, and additional funds were not available from NIE's dissemination group, which presumably had priorities other than higher education and no special contact with the Center. The Center is now assigned to the Educational Policy and Organization Division, but it may still be a problem to get the attention of the Associate Director for Dissemination and Improvement Practice. In principle, the institutional monitors and the office coordinating them ought to be able to help deal with an issue of this sort that cuts across NIE's divisions, but we are not sure just how that authority has been defined. Further, we are sorry to find that the current institutional monitor will have to be replaced because he is assigned to yet another NIE division. We recognize that it is valuable for a monitor, if that role is to be only part of his or her assignment, to have other interests at NIE that parallel the substantive concerns of the institution being monitored. But if that divisional identification is too narrowly construed when he or she is acting in the monitor role, that role cannot serve its intended cross-cutting, cross-NIE functions.

Finally, NCHEMS was the first, and is still the only, organization to enter into a long-term institutional relationship with NIE That relationship, the terms of which are broadly outlined in a written document, had a salutary

effect on the operation of the Center and the morale of its staff. It was solidified with the issuance of a 3-year contract, with the expectation that the specific scope of work would be renegotiated annually and a plan for renewal of the 3-year term submitted and approved toward the end of the 2d year. Though it was clearly understood that the establishment of a special relationship in no way bound NIE to maintain that relationship indefinitely, it is equally clear that the intention of the agreement was to signal approval of the direction being taken by NCHEMS and to provide the Center with greater fiscal security. These initial expectations have not been fulfilled, and there is clear evidence of disappointment within the Center's staff and its Board. The Panel team believes that the arrangements as originally proposed are exemplary and might well serve as a model for the development of relationships with other laboratories and centers. We hope that NCHEMS' initial optimism, occasioned by the establishment of the long-term relationship, can be speedily restored.

NATIONAL CENTER FOR RESEARCH IN VOCATIONAL EDUCATION

Ohio State University
Columbus, Ohio

Institutional Definition and Mission

The mission of the National Center for Research in Vocational Education (NCRVE) is to increase the ability of diverse agencies, institutions, and organizations to solve education problems relating to individual career planning, preparations, and progression. The Center fulfills its mission by (1) generating knowledge through research; (2) developing educational programs and products; (3) evaluating individual program needs and outcomes; (4) operating information systems and services; and (5) conducting leadership development and training programs.

The Panel members on the site visit thought it important to restate this mission, which has been constant for over 13 years. It is consistent with the intent of the Congress and supportive of its mandate to NIE relative to "preparation of youths and adults for entering and progressing in careers" [P.L. 94-482, Sec. 403,(2),(D)].

The site visit and review of the Center's operation, as related to funded programs in such areas as research, dissemination, and management reinforce the earlier recommendation by the Panel that a long-term institutional relationship is necessary for this Center to execute its mission fully. NIE's funding of fundamental research and expanded dissemination activities at the Center will provide the leverage necessary to affect key problems in the areas of greatest priority. NCRVE, in implementing its mission, will strengthen the efforts of NIE to establish a national research and development system.

Institutional Governance, Accountability, and Self-Evaluation

NCRVE seems to have a superior governance arrangement in that the Executive Director of the Center reports directly to the Provost of the university. Panel members met with the Provost, and it was evident that the Provost considered the Center on an equal footing with the 16 colleges of the university. The university has demonstrated active support of the Center and continues to plan for additional, much-needed facilities for the Center. The stability of the Center's leadership, and specifically of its Executive Director, has greatly enhanced the institution's role and credibility both in the university and in the R&D community.

Another aspect of the Center's governance is the National Advisory Council for Vocational Education, appointed by the Secretary of HEW and presently being reestablished. The team members were concerned about the fact that the Secretary did not give the Center the opportunity to recommend people for consideration to serve on the Council. A similar problem is noted with regard to advisory councils assigned to particular projects of the Center that NIE supports. The Panel members tended to believe that recommendations might have been made by the NCRVE but were ignored by NIE.

The professionalism and capabilities of the Center's staff were readily discernible to the Panel members. Through explanation of program activities, products, and staffing patterns, accountability for program outcomes can be checked or verified. A second means of accountability is provided in the fiscal management of the programs and products.

The Center nas an elaborate program of self-evaluation aimed at three goals: (1) to describe the Center internally and externally, (2) to improve the activities that are carried on, and (3) to determine the accountability and impact of the work it does. Four techniques are used in this self-evaluation. First, products are reviewed both internally and externally for scholarship, equity, marketability, usability, and communicability. A second technique is the use of external panels to review a proposal when the concept is designed, when it is implemented, and when the product is finished. A third technique, user trials for products, includes pilot projects, field work, and feedback. These trials include surveys soliciting client input. The last technique is an internal quarterly review of each division, its personnel, its management practices, and the status of specific products.

The Institution's Activities and Projects and Their Impact and Usefulness

A review of the NCRVE's proposal and the programmatic activities being conducted under the NIE multiyear plan revealed that (1) what is proposed is of national significance and of utility well beyond the field of vocational education; (2) the scope of work grows out of previous efforts; (3) the organization has the competence and staff to carry out the scope of work; and (4) the organization has strong field relationships and the ability to get its products used.

It was observed in one program, Career Development, that intense work is being accomplished in the development of theories. This is a significant direction in that the subject of career education versus career development is discussed extensively. The Center's program can add much

to pull together the fragmented approach witnessed in the field. The Center has already completed a "Career Planning Support System." The Panel members believe that this support system would be strengthened with further validation and would ultimately be useful in the field. Continued work would be encouraged with the proper funding. The secondary school targets for the previous guidance work could benefit from the Career Planning Support System, which provides systematic guidelines for schools and central administrations. One program involves predictive tests in career decisionmaking. This is a continuation of the Center's expressed research interest in decisionmaking on career choices. This study involved parents during a 3-year period. It contributes directly to the field of career choices, career planning, and career decisions. The team believes that all the programs in career development should be worked on in collaboration with other laboratories and centers, or institutions attempting to systemize this area. NCRVE is making a valuable contribution in this key problem area.

The Content and Method for Career Preparation program for Vocational Education was observed by Panel members. This program also used a multidisciplinary approach, with references to industrial and military efforts in defining tasks and analyses essential to job performance. The Center has produced documents for curriculum builders and for schools. These content and method documents seem to have value for revamping the training programs of undergraduate teacher institutions as well. Further, the problem area of transferable skills is a promising one and merits further investments.

The team members felt that the Experiential Education program dealt with an important concept that is certainly worthy of exploration. This program is divided into three projects: the Policy Studies Project, the Evaluation Project, and a project on Success Factors. These three are presently ending, and the first 2 months of the 18-month grant period will be used for planning based on the outcome of the present effort. The work being planned will provide hard data for decisionmaking and will lay out research agenda on experiential learning. In addition, the research methodology will have to be developed. In the past, work in this area has been somewhat hampered by the NIE dictation of a large advisory panel without Center input, and by monitoring difficulties. The team hopes that these difficulties will be relieved, now that the Advisory Council is being dissolved and a new monitor for the projects has been appointed. Further, a longitudinal evaluation study should be supported to strengthen the research and information base with respect to education and work problems.

Although it is still relatively new, the Resource and Referral Service, which is a part of the larger Research and Development Exchange (RDx) impressed the team members. Once this service is developed further, it will add strength and usefulness to the RDx and could go far in getting organizations doing similar kinds of research to work together. This will contribute to the development of an R&D system, an NIE priority.

The Dissemination and Articulation Project is an effort to have the research coordination units and State departments coordinate their efforts at the State level with the following education research groups and projects: (1) State capacity grant staff; (2) State facilitators as part of the National Diffusion Network; (3) demonstrative developments; (4) the RDx of NIE; and (5) the R&D utilization projects. This project, which is

sorely needed, could be an important step in the coordination of research efforts at the State level. Panel members are concerned that this project might not be effectively implemented, with funding at such a low level. The $34,000 for the 18-month period should be increased if this program is to operate effectively.

Personnel Management and Affirmative Action

The structure of NCRVE has enabled it to develop a multidisciplinary staffing approach within the organization. Most of the social science disciplines are represented on its full-time staff, helping the Center provide cross-fertilization and a critical mass of expertise to focus on its programs.

Although the team members felt that there is still room for improvement, they also felt that the Center has made progress in moving toward affirmative action in appointing new personnel during the past 18 months. Several women and minorities have managerial responsibilities as associate directors and as program and project directors. The team noted that more positions for work on the United States Office of Education (USOE) contract are open and encourages the Center to continue this trend toward affirmative action appointments. NCRVE and the university recently underwent an extensive Office of Civil Rights review and received a positive report.

The team was pleased to see incentives for excellence in the personnel management system. Staff development opportunities are provided to staff members whose performances warrant it. This practice also contributes to organizational renewal. It is also important to note that personnel within the Center can work into management positions. It was noted that graduate research associates (more than 50 employed half-time at the Center while pursuing a masters or doctoral program) reflect an overrepresentation of affirmative action and will contribute to the pool of trained researchers.

Financial Management

The financial and program management of the Center is well organized. One key feature of both the program and the fiscal affairs management is the information displayed in a situation room. All programs and staff activities are graphically detailed in terms of activities, deliverables, and milestones. These program activities and deliverables with dates are converted to resource requirements using detailed budgeting guidelines. The latter conform to a uniform system of accountability such that staff members as well as managers can comprehend each piece of information. The Center has undergone many audits, including a comprehensive preaward audit for the present funding from USOE. The Panel members thought it important to note that, since only a percentage of the funding comes from NIE, safeguards are taken to prevent any commingling of funds. The whole financial management system is crucial to the management of the Center and is an integral part of this complex university. A detailed budget report is provided monthly, showing the unencumbered balance, expenditures, monthly budget, total budget, program-to-date budget, and variance. In addition, a monthly project status report enables the staff to reconcile project activities in conformance with schedule and performance status. The Panel concluded that the management apparatus is well designed and that NCRVE should experience no major problems in managing funds and programmatic efforts.

General Comments and Summary

NCRVE is a strong institution, which can and should serve as an extremely important national resource for all levels of the educational system in the United States. The team members felt that the excellence of the Center's work has been and remains readily apparent both because of their ability to attract funding from diverse agencies and because the use of their materials is quite widespread. It is significant that no conflict was perceived between USOE and NIE activities; indeed, they are supportive and complementary. The smooth operation of the Center in its longstanding mission and the coordination of the work being done for various funding sources point to the Center's strong institutional capabilities.

The site team noted the following points:

1. Since NCRVE has the know-how and the potential for delivering services to agencies and individuals, its role should be enlarged and funds provided for these services.

2. The roles of monitors must be more clearly defined. It is often reported that program monitors exceed the scope of project accounting and that they sometimes could be confused with policy monitors, a role that rightfully should be left to the Center's Executive Director and to the Director's Office of NIE. The new institutional monitor should serve as a liaison between the Office of the Director of NIE and the Center's Executive Director.

3. In an operation as large as the Center's, discretionary money should be provided in the funding package from NIE to enhance dissemination and provide for the technical assistance that is constantly requested and needed. This is also necessary to ensure the continuation and planning essential to the efficient management of multiprogram operations.

4. Some funds should be provided for internal evaluation within the Center.

5. In order for short-term or even long-term benefits to accrue in a research and development effort, increased funds should be provided for dissemination and feedback.

6. The team, after its site visit, is more firmly convinced that the National Institute of Education should enter a long-term institutional relationship with the National Center for Research in Vocational Education. If the Center has this kind of support in accomplishing its mission, the efficiency and effectiveness of the R&D system will be greatly increased, thus helping to fulfill the mission of NIE. Further, the Panel members believe that the National Center, in terms of its organization, competencies, stability, research, dissemination, and diffusion, could contribute to the strengthening of other organizations of similar purpose and role in the Nation's R&D delivery system.

RESEARCH AND DEVELOPMENT CENTER FOR TEACHER EDUCATION

University of Texas
Austin, Texas

Institutional Definition and Mission

In its site visit, the team found the Research and Development Center for Teacher Education (RDCTE) to have a well-designed and focused mission, which we perceived as follows: to develop research-based knowledge of the ways in which different children most efficiently master basic intellectual and life-coping skills, and to improve teaching through the utilization and dissemination of the findings of this research. This mission fits well into NIE's program on Teaching and Learning.

Institutional Governance, Accountability, and Self-Evaluation

The team was impressed by the adequacy of the Center's means of governance. In addition to self-evaluation, accountability of Center activities is conducted by several groups. These include (1) NIE program monitors, who provide continuing critical and constructive examination; (2) outstanding experts in particular areas, who conduct formal reviews of specific programs as external consultants to NIE; (3) consultants brought in by the Center itself for particular programs; and (4) internal staff in collaboration with practitioners and external consultants, as illustrated by the retreat involving the Procedures for Adopting Educational Innovations/Concerns Based Adoption Model (PAEI/CBAM) program staff. These procedures are well adapted to the varied requirements for expertise to evaluate the Center's different programs.

The Executive Council, comprised of the Center program directors, currently governs RDCTE activities.

Some program priorities are developed from well-designed needs assessments with the systematic involvement of practitioners. This approach is illustrated especially well by the Collaborative School-Based Project and the Project on the Design of a Research and Development Agenda in Teacher Education.

The Center is beginning to establish a six-member National Advisory Board, on which minorities and women will be represented. In addition, an effort will be made to include a lay person. Current plans are to hold two meetings a year, at critical periods in the Center's own planning. The team agrees with the RDCTE Director that this represents a limited but important effort, since funds are not available to support the necessary number of National Advisory Board meetings.

The Institution's Activities and Projects and Their Impact and Usefulness

With its long history of educational R&D, the Center has been able to recruit an interdisciplinary staff well qualified for educational research.

After hearing the presentations by program directors and other staff members, the visiting team concluded that the four major programs and three additional projects now underway are clearly related to the Center's mission. The Teaching and Learning Interaction Program represents a basic research attack on the comprehensive problem of the interaction of learner, teacher, and context variables. The Evaluation of Teaching Program provides refined analyses of rating and observational techniques that can be fed into the Teaching and Learning Program, besides providing methodological findings that can be generalized to many areas of educational research. The team felt it desirable to encourage the modification of procedures in any one program in the light of applicable findings from any other Center program. We hope there are no administrative hindrances to such flexibility.

The Correlates of Effective Teaching Program and the Collaborative School-Based Project are contributing effectively to the dissemination of research findings and are involving teachers systematically in the selection and planning of research, as well as in the immediate utilization of results in the classroom.

The newly initiated project on Designing an R&D Agenda in Teacher Education is, likewise, based on a participatory model of research dissemination, involving the user from the initial phases. PAEI/CBAM program is a thorough study of the process through which innovations are adopted and of the reactions of practitioners to such innovations.

The Disruptive Student Project, also newly initiated, is concerned with a widespread condition that is known to interfere with effective teaching and learning. Hence it relates significantly both to the Center's mission and to its other programs and projects.

It was observed that both the University of Texas and the school district involved are highly pleased and enthusiastic about the Center's work and its practical contributions. The university uses Center products for student assessment as well as for training in its College of Education and plans to continue and expand their uses. The school district uses Center resources for inservice needs assessment and for teacher evaluation. The team also noted the Center's interactions with other institutions that deal with teacher training, such as the Far West Laboratory and the Center at Michigan State University.

Personnel Management and Affirmative Action

In general, staff morale is good; there is a strong feeling of identity with the Center and high motivation. On the other hand, the lack of a long-term funding commitment creates feelings of job insecurity and makes it difficult to retain some high-level personnel with developed research skills.

With regard to recruitment, there is a freeze on hiring because of insufficient funding for both the university and the Center, which reduces the immediate possibilities of greater minority staffing. Nevertheless, it is recommended that the Center make efforts toward preliminary recruiting so an adequate pool of minority candidates is available when openings occur.

At present, there are no minorities on the RDCTE's payroll. The only member of a minority conducting research for the Center is a full-time university faculty member, who has no reduction in teaching load for the first 6 months of his project but has been promised a one-quarter lighter schedule in December 1978. He is

currently directing the Disruptive Student Project on his own time, with no additional pay from any source.

The College of Education has been more successful than any other part of the university in recruiting minority students; however, most of these minority graduate students are in applied rather than research-oriented fields of education. To alleviate that problem, the Center submitted a proposal to NIE for a program to train women and minorities to participate in high-level research on educational problems. That was not funded, however, because it failed to meet an Institute guideline for programs of a single 18-month duration. The Center had proposed two successive 18-month periods, constituting a 3-year program leading to the Ph. D. degree. The team feels that such a program would produce fully trained, professional minority researchers. Shorter programs already funded at some institutions provide personnel only at lower research levels. Although an alternative short-term model exists that is designed for graduate students already well advanced toward the completion of a Ph. D., it reaches a much smaller segment of potential researchers. The team does see a need for all three types of programs, but we feel the 3-year program is likely to have the greatest success in expanding the number of minorities and women qualified for high-level research positions. The team is pleased that, in its most recent solicitation, NIE has changed its guidelines to permit the reconsideration of the longer program.

Financial Management

NIE is the Center's sole source of funding. The administration of the budget lies with the staff of the Center. The university's Office of Sponsored Projects participates only in the initial process, i.e., solicitation and submission of proposals and negotiation of contracts and grants. Thereafter, all financial dealings are between a special unit of the university's business office and the Center.

In the early days of the Center the university provided some supplementary support for the Center's work, but it declined sharply following NIE's initiation of the "program purchase" policy. This condition still prevails today.

General Comments and Summary

Overall, the site visit was constructive in clarifying for the team members issues raised by the Panel in its review of the Center's 5-year plans, as well as in answering individual team member questions. The team's general reactions fall into three broad, interactive areas: institutional relationship, lack of minority representation on the Center's staff, and dissemination.

The site team recommends to NIE, as the Panel did in its Interim Report, that NIE establish a long-term institutional relationship with RDCTE. The team felt that many of the concerns raised earlier by the Panel could be resolved if this institutional agreement were initiated. For example, support from the university, which decreased when the program purchase policy was instituted, would probably increase. Increased institutional stability would be conducive to the recruitment of high-level minority personnel, who have been hesitant to work in such a financially insecure environment. Through a long-term agreement with NIE, flexibility would increase, enabling the Center to coordinate its programs' work efforts to complement and build on each other.

On a positive note, the NIE institutional monitor and the other most active program monitor for the Center could and should serve as models for ways that NIE personnel can contribute to the strengthening of R&D centers.

Regarding our second point: although the team understands that certain factors have hindered the recruitment of minority staff, we cannot stress enough the need to overcome these hurdles. The team is encouraged by the university's recruitment of minority graduate students and hopes that this factor will increase the pool from which laboratories and centers or other research organizations can eventually draw. In the meantime, some means *must* be found to encourage the participation of minorities in the Center's work (e.g., employment of minority consultants, appointments to boards, recruitment of graduate students). Assuredly, some means should be found to pay for the full-time services of the Center's minority researcher!

Finally, the team members were enthusiastic about the work going on at the Center. Considering the financial restrictions, the amount of dissemination actually accomplished is impressive. The team was discouraged, however, that much of the fine research that is completed cannot go through development and dissemination to a broader audience because of NIE's withdrawal of development initiatives. In many cases, this prevents the materials from being prepared, modified, and distributed to audiences that need them most, such as teachers and school system personnel. The team feels that NIE should reconsider its curriculum development policy to enable school districts to benefit more from this research investment.

WISCONSIN RESEARCH AND DEVELOPMENT CENTER FOR INDIVIDUALIZED SCHOOLING

University of Wisconsin
Madison, Wisconsin

Institutional Definition and Mission

The Wisconsin Research and Development Center for Individualized Schooling (WRDCIS) has evidently given considerable thought to defining its mission and the relation of its various projects to that mission, as indicated by the recently prepared Introduction to the April 1978 *Technical Proposal*. One thread runs through this mission, from the inception of the Center in 1964 to the present: the furthering of individualized schooling. This goal is made even more explicit in the recent change of its name from the Wisconsin R&D Center for Cognitive Learning to WRDCIS. The most conspicuous outcome of the Center's work is the comprehensive approach to schooling designated as Individually Guided Education (IGE), an approach that has been widely adopted in schools.

It should be noted, however, that IGE has been variously defined, a fact that caused the site visitors some confusion. Within the Center there have also been changes in the IGE concept and its implementation, emphasis being placed at different times on multiunit schools, instructional programing, development and distribution

of instructional materials in mathematics and language, and training in and dissemination of the IGE approach (illustrated by such features as team teaching and participatory decisionmaking).

The Center has recently shifted its focus to basic research. This shift was of some concern to the site team. In view of the Center's history of successful product development and implementation, the team was concerned that this new emphasis would not allow the greatest strengths of the Center to be fully utilized. The team hopes that the Center will continue to maintain a balance between basic and applied research and development and implementation activities.

Institutional Governance, Accountability, and Self-Evaluation

Governance of the Center has been influenced in two ways by its relationship with the University of Wisconsin. First, the Center derives support for all aspects of its operations from the positive nature of this relationship. It is clear to the team that the university regards the Center as a significant and valuable part of the university structure. Specifically, in terms of the governance structure, the Center has been influenced by the long tradition of collegial governance that operates in the university as a whole. The tradition of faculty participation in decisionmaking is reflected in the Center's chief policymaking body, the Center Planning and Policy Committee (CPPC). The CPPC is composed of the Codirectors of the Center and the chairpersons of each of the major work areas within the Center. In addition to making policy for the Center, the CPPC plays a major role in carrying out self-evaluation and accountability procedures for the Center's programs. Assessment of programs, allocation of funds, and determination of project priorities are some of the concerns of the CPPC. Program accountability is also achieved through the recommendations of the advisory committees that work with each of the work groups within the Center. The four or five members of each advisory committee come from outside the Center and bring to the individual work groups a wide range of expertise. The advisory committees meet with work groups at least once a year, and individual committee members are consulted by the work groups as needed. The chairperson of each work group advisory committee is a member of the Center Advisory Committee, which considers broad issues relating to such things as the Center's mission and overall direction.

An additional procedure for accountability and self-evaluation is the making of recommendations by both NIE program monitors and the NIE institutional monitor. It is the feeling of team members, however, that institutional monitors cannot be as effective as they might be under the present NIE policy, which demands that their monitoring duties be performed in addition to other responsibilities at NIE headquarters. The team recommends that NIE reexamine the role and responsibilities of institutional monitors.

One aspect of governance that caused some concern to team members relates to classroom teacher input into the decisionmaking process at the Center. Apparently, only one of the Center advisors represents a classroom teachers' organization. The composition of the policymaking body of the Center, the CPPC, precludes classroom teacher membership. However, there is ample evidence that the operation of the Center's programs brings its personnel into continuous contact with classroom teachers. The Center's 25-State network is particularly effective in

disseminating information about individualized instruction. The team has no reason to doubt that Center staff members take every opportunity in events such as workshops and informal discussions to listen to the current concerns of teachers and administrators. The team feels, however, that some formalization of the contact between classroom teachers or their organizational representatives and Center staff is needed to determine teachers' concerns and ways in which the Center might respond to those concerns. At present, many of the teachers with whom the Center has contact are involved in, or contemplating involvement in, Center-sponsored programs. One might assume that the problems and concerns raised by these teachers are concentrated around their involvement with Center programs. If the Center wants a clearer image of the role it might play in responding to teacher concerns, it must increase its communication with teachers and/or their elected representatives who have had little or no contact with the staff of the Center and are therefore unfamiliar with its programs.

The Institution's Activities and Projects and Their Impact and Usefulness

The Center has organized its activities into six groups:

Administration and Organization for Instruction Work Group On the surface, this group appears able to realize its project's objectives. The major objectives are:

1. to conduct basic research on computer support, administrative organization, and productivity on four levels of school organization;
2. to develop prototypal informational, organizational, and financial decisionmaking designs that facilitate effective instructional programing; and
3. to synthesize knowledge gained from research.

The development of a microcomputer system for use in classrooms could become a valuable aid to teachers. Four studies are proposed to analyze computer technology: (a) historical analysis, (b) analysis of teacher personality types and computer system success, (c) analysis of teacher behavior in using time, and (d) analysis of the impact of technology on student opportunities.

The site team received the impression that no clear hypotheses guided the research on computer studies. The personnel assigned to the projects seemed to lack the sophistication in research design that would enable the team to gain a secure feeling that significant new knowledge would be produced in the short- or long-term future.

Evaluation of Practices in Individualized Schooling Work Group The purpose of this group was to evaluate IGE to gain a more comprehensive view of the system's operation and effectiveness. This five-phase plan impressed the team as feasible and desirable. Some form of IGE exists in 25 States and 2,000 elementary schools. However, there appears to be little knowledge of the overall effectiveness of IGE and the factors or processes in IGE that contributed to pupil learning and other objectives.

The proposed evaluation would also attempt to identify successes in reading and math that might be associated with IGE. Schools using IGE are to be compared with schools using only some facets of IGE and with non-IGE schools. The site team feels that there are methodological

weaknesses in the evaluation plan and recommends that the Center reexamine it.

Implementation of Individualized Schooling Work Group The objectives of this program are to:

1. improve practices in schools and teacher education institutions through the use of research and development outcomes; and
2. provide a means of exchanging information between the Center and other education agencies.

Two activities within the program are research on planned change and the strengthening and expansion of existing State networks to encompass urban and secondary schools.

The team believes that the Center has the capabilities to pursue these activities, but feels that this implementation program overlaps the evaluation program. Further, it appears to the team that the questions relating to innovations will not provide productive knowledge. We recommend that the Center reconsider the programs for implementation and evaluation with a view to possible consolidation.

Studies of Instructional Programming for the Individual Student Work Group Three of the six work groups fall closer to the basic research end than to the application end of the R&D continuum. These are "Studies of Instructional Programming for the Individual Student," "Studies in Mathematics," and "Studies in Language." The first of these work groups reports a triple objective:

1. to generate knowledge about the learning and development processes that underlie basic skills acquisition at elementary and secondary school levels;
2. to generate knowledge about the instructional processes associated with individualized education; and
3. to formulate and apply a prototypal instructional design for individualized schooling.

The particular research projects classified in this group range widely, as illustrated by studies on the devleopment of metamemory and metacognition, cross-age tutoring, learning in small groups, student's communicative competence in instructional contexts, and the adaptation of instruction to student learning styles. The last-named project is concerned with interactions between learner viariables and instructional procedures. In this connection, the team called attention to instances of higher order interactions that would complicate the analysis of findings and limit their range of applicability. Another project in this group deals with instructional programing for the individual in secondary schools, reflecting the Center's emerging efforts to extent the application of the IGE approach beyond the elementary school.

Studies in Mathematics Work Group The remaining two work groups address the content of schooling. The Studies in Mathematics Work Group is currently focusing on basic research on mathematical skills, particularly on the relationship between instruction and initial mathematical learning. The Center notes that its product development stage has been completed.

This work group is also conducting a study of the installation of a Center-developed mathematics program in urban schools. Other parts of the study, dealing with other programs and a broader sampling of schools, are underway in the Evaluation Work Group.

Studies in Language: Reading and Communication Work Group Studies in Language covers a variety of projects. Most deal with reading, ranging from studies of letter perception through investigations of words and sentences to research on text comprehension. One project is concerned with children's speaking and listening skills, and two others deal with the comprehension of orally presented material. One study, closer to the applications end of the R&D continuum, is investigating the effectiveness with which separately learned skills are used in the actual reading process.

In general, the team was concerned about limitations in the knowledge of Center staff about research on similar problems underway in other centers or laboratories. Obviously, familiarity with such research would be mutally strengthening and would also be a safeguard against duplication of effort. It seems that NIE policies in the past have fostered a competitive rather than a collaborative relationship among the centers and laboratories—a condition that discouraged free communication. The team strongly believes that more intercommunication about ongoing research should be encouraged.

Personnel Management and Affirmative Action

The team was pleased by the number of women on the Center's professional staff. However, we were disappointed to learn that there are currently only four professional minority staff members. The Center is working closely with the university's Affirmative Action and Minority Programs Offices in hopes of recruiting additional minority staff, but these efforts have not been very successful. The team was pleased to learn that the Center has formed some linkages with the National Urban League and with black colleges, universities, and professional publications across the Nation. We encourage them to improve and expand those efforts. In addition, the team recommends that NIE, and perhaps the Council for Educational Development and Research (CEDaR), inform Wisconsin and all other laboratories and centers about the institutions NIE has funded to provide R&D training programs for minorities and women, since these institutions represent an additional source of prospective minority personnel.

The Center, in cooperation with the university's School of Education, is beginning a program to expand the opportunities for women and minorities in postdoctoral research. The team felt that although this program would increase opportunities for women, its chances for increasing minority participation are dubious because the program is geared toward the university's faculty, which has a small number of minority faculty members. In this regard, the team believes the Center's participation in a program at New Mexico State University offers better possibilities for increasing minority involvement in R&D.

Financial Management

The Center has an Office of Business Management, which handles the internal day-to-day requirements for budgeting and accounting. The grant from NIE is accepted through the university and managed by it. The Center's personnel are paid through the university's payroll center, and its financial operation is supported by the university's computer system. The Center's own computer is used for internal budget applications and program routines.

The Center's operation is subject to audits by the university, the State, and HEW. NIE's

requests for detailed information on minute matters, such as staff travel for program components, pose some problems for the Center. The team felt that the financial management of the Center was efficient.

One significant feature of the financing of the Center is that it receives about 90 percent of its funds from NIE. Therefore, its programs must be responsive to NIE priorities and guidelines.

General Comments and Summary

The team would like to summarize four impressions of WRDCIS that it believes are particularly important; these impressions deal with the Center's mission, the involvement of classroom teachers in decisionmaking, the evaluation of IGE practices, and the recruitment of minorities. This summary also includes a number of recommendations to NIE.

First, the team feels that the current emphasis on basic research at WRDCIS may not make the best use of the Center's human resources. In view of the long and successful history of the Center in product development and dissemination, the emphasis now being placed on basic research bears reexamination by both NIE and the Center. This reexamination is of particular importance because the change in direction at the Center appears to be, to a great extent, a result of decisions made by NIE.

It is the impression of the team that classroom teacher input in setting Center priorities is presently informal. In view of the Center's plans to extend certain aspects of its work gradually to the junior and senior high school levels, which present larger and more complex forms of organization, it seems advisable to develop more formal procedures for assessing teacher concerns and for maintaining contact with the major teacher organizations. As was noted earlier, the team recommends that more attention be given to increasing the involvement of classroom teachers or their representatives in the governance and advisory activities of the Center.

The team received a much more comprehensive view of the range of activities and programs that stem from the IGE concept as a result of its visit. Since IGE has become one of the most widely disseminated and popularly received of the programs that have received Federal support in their development, the evaluation program contemplated by the Center is of great importance and could add much to our knowledge about individualized learning.

The team strongly recommends that the Center increase its efforts to recruit and train additional minority personnel, and we commend the efforts already made. The team believes, however, that the small number of minority professionals on the staff will affect the credibility of the Center as it increases its work in urban schools with large concentrations of minority pupils. The problem is particularly difficult for laboratories in areas that have small numbers of minorities in the native population or, in the case of centers, in both the native and student populations. Small minority populations in an area not only make minority recruitment difficult but also cause difficulties for laboratories and centers attempting to deal with this problem.

The team would like to emphasize the following points to NIE:

1. The problem of undesirable duplication of research efforts among laboratories and centers has resisted solution as a result of past NIE policies, which have given those institutions little incentive to share their

best work. Although a degree of competition among laboratories and centers is inherent in the current structure, the team encourages NIE in its recent efforts to increase the atmosphere of cooperation. We strongly urge that these efforts be sustained and intensified.

2. As a result of its site visit to WRDCIS the team concluded that greater flexibility should be permitted the Center's management in allocating funds among its work groups. The team suggests that when a center has demonstrated to NIE officials and Government auditors a high degree of management capability, then the center should be allowed to assume some degree of responsibility for the allocation of funds among its programs.

THE LABORATORIES

APPALACHIA EDUCATIONAL LABORATORY
Charleston, West Virginia

Institutional Definition and Misssion

Appalachia Educational Center's (AEL) mission is to improve education and educational opportunity for residents of the primarily nonurban areas of its seven-member-State region. Serving rural and extreme rural areas of Alabama, Kentucky, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia, AEL has a special, unique, and admirable commitment to its region. Its mission is well suited to the needs of an area where most of the population holds tightly to tradition, where ties to home, neighborhood, and family are exceedingly strong, and where the culture changes very little and very slowly—if at all. AEL has developed a sensitive perception of how to affect the educational system in this region. The Director and staff seem tuned-in to the protocol and politics of the relationships between various forces in the school community. Such sensitivity is obviously necessary and has clearly contributed to AEL's impact on schooling in Appalachia.

AEL is clearly carrying out its mission as a catalyst in improving the quality of life in the Appalachian Region, by improving education through service and the processes and products of R&D.

For example, the Career Decision-Making Program has produced high-quality material, including textbooks and teachers' guides, which are being published and disseminated by commercial publishing firms. The material is of immediate use to teachers not just in Appalachia, but also throughout the Nation; and it presumes a refreshing and valuable autonomy and professionalism on the part of teachers. The staff of AEL have a feeling for and identification with practitioners' needs. Their products assume decisionmaking capability on the part of teachers and address them as main actors in the education of children, not as conduits for materials produced in an ivory tower.

The Early Childhood and Parenting Program furnishes good examples of AEL's impact. This effort resulted in support of home-based preschool programs and probably prodded several member-States into adopting kindergarten programs. The EBCE program and Educational Services Program are also bringing about clear, concrete changes for the better in the region's educational network.

Much good work is being done here in dissemination. At the same time, we recognize that R&D in general and AEL in particular have a way to go before classroom teachers profit directly and substantively. Concentration on this problem by AEL is consonant with its mission; and AEL has an especially good chance of substantially contributing to a solution because the Lab's staff and Director understand the needs of schools and their constituencies.

Institutional Governance, Accountability, and Self-Evaluation

The site visit team was impressed by the care and dedication of the Executive Committee of the Board. The relationship between the Executive Committee and the larger Board appears to be a vital one; it is not merely a rubber stamp operation. The Planning and Development Committee of the Board is substantially involved in defining and reviewing programs.

We applaud the recent decision to add representatives of teachers to the Board. The move is likely to contribute to two ends: to increasing the number of women on the Board and to establishing more direct ties with teachers in the governance of the institution and the identification of the program's missions and proposals. We would encourage the Board, however, to strive for an Executive Committee that reflects the composition of the Board and to continue to try to make the Board more representative of women and minorities in the region. We did have some concern that the Executive Committee appears to have more representation of institutions of higher education than the total mix would warrant. We also think that in the overall context of governance it is not inappropriate to mention the concept of the "old boys network" and to ask the Lab to be mindful of that implication in determining the composition of both the Board and the Executive Committee.

The Director clearly has the trust of the Board. His style appears to be thoroughly compatible with the representational diversity on the Board and the mission of the Laboratory, given the seven-State context in which AEL operates.

We were especially impressed by the collegial nature of the Lab's overall operation. The staff work closely and easily with one another, they are accessible to one another, and the ample opportunities for discussions and meetings within and across program areas contribute to the program's coordination and integration. We were impressed with the way in which supervisors for one project appear to work easily in other projects for the persons they supervise.

AEL staff are addressing the continuous process of self-evaluation of their projects, and we encourage the Board of Directors in their development of an evaluative process for the Laboratory as a whole.

The Institution's Activities and Projects and Their Impact and Usefulness

Overall, we concluded that AEL's products have been substantial and that the Lab has had an important impact on the policies and practice of education in the region. AEL's program activities may be divided into four main areas.

Educational Services Program The site team was very impressed with the dissemination activities being conducted under the Educational Services Program. The Regional Exchange component looks very good. The staff exhibit understanding of their task. We believe they should be applauded for their active involvement with other labs and centers and for building bridges between labs and centers and NIE and USOE for purposes of dissemination.

The Panel was not as convinced about the cohesiveness of the Research, Development, and Evaluation (RD&E) component as a program; but this concern is not a criticism of any specific element of the activities supported. Individually, these seem appropriate and useful, but taken together, they appear to be somewhat disparate. This issue, we suspect, is generic to the mission

and philosophy the Lab has defined for itself; for the purpose of the RD&E component is to undertake needs-sensing activities and RD&E projects jointly with member-States. Therefore, individual activities are always likely to display a diversity which reflects the many differences existing between the member-States despite their common Appalachian character. Still, by stating our observation here, we encourage the Lab to strive continuously for coordination and integration wherever it can be achieved.

The site visit team would especially like to single out the pamphlet "Do you know the early warning signs?", which we believe is a highly effective contribution to dissemination (assuming wide distribution and easy availability), even though it is the essence of simplicity.

Experiential Education Program The Experience-Based Career Education program (EBCE) developed at AEL is one of our model programs designed to offer high school youth alternatives to conventional academic curriculums. To provide career-related experiences and information, each of these programs makes use of community resources. It has already been demonstrated that such programs are both feasible and educationally sound; so a major task at each of the development sites now involves disseminating information about the various alternatives and encouraging their adoption. These dissemination activities have a prominent place in the program at AEL.

Beyond the need to spread the word about the educational viability of experience-based career education lies another need: to extend such programs to levels of education above and below high school and to adapt them to suit special groups of students. The staff of AEL are actively engaged in both these efforts. They are working on ways to extend EBCE programs downward to junior high schools and upward to community colleges. At the same time, they are exploring ways of adapting such programs to the needs of mentally disabled students as well as to those who are academically talented. These activities strike the Panel team as being natural extensions of a very promising curricular innovation.

Like all innovations stimulated by outside funding and support, the EBCE programs run the risk of being abandoned when outside interest ceases. Thus it is important to understand how and why such programs endure and become institutionalized in some schools but not in others. The staff of AEL are studying this process; in addition to initiating their own studies, the staff are clearly aware of and in contact with investigators working on the same problem throughout the country.

These are but a few of the several directions, all of them promising, in which EBCE-related work is moving at AEL. The Panel commends the management and staff of the Experiential Education Program for their well-articulated and integrated approach to the advancement of a challenging set of educational ideas and practices.

Career Guidance Division The visiting team was impressed by the programmatic efforts of the Career Guidance Division. The primary effort of this division has been the development of a high school Career Decision-Making (CD-M) program. This is a curriculum-based career guidance program, as well as a career information system. It has a total of 50 products, which are being commercially published by the McKnight Publishing Company. According to reports, the 6-month sales of the CD-M program have already exceeded McKnight's original 1-year sales goal;

by the end of the first year of publication these materials should be affecting approximately a quarter-million students.

The visiting team felt that AEL's plans to extend and modify the CD-M program and its current linkages with the EBCE program are positive reflections of a well-defined and evolving program design.

The team was greatly impressed with the CD-M program and recognized its value as a tool for teaching and career guidance. We encourage AEL to monitor the institutionalization of the program, focusing on the utilization of its products and on the influence these have on students' career choices.

Early Childhood and Parenting Program The objective of this program is to find out how Appalachian communities and their schools can foster the development and educational progress of children through educating parents and involving them in their offspring's learning process.

Project HOPE began in 1966 as a cooperative venture with the University of West Virginia; the initial effort was a study of the cognitive development of young children in the region. Though Headstart had already begun, at that time there were no kindergartens in some of the member-States.

The program was well-designed to provide preschool preparation. Paraprofessionals were recruited locally and trained fully. Operating out of local school systems, these individuals visited homes and worked with parents to help them engage their children in activities which would stimulate their development. When the need for such services became obvious, these paraprofessionals were also trained to identify community resources involving social relations and health.

The project developed a daily TV lesson and provided a weekly group experience with a teacher in a mobile classroom. This could reach into remote rural areas.

It also developed and published a training manual for paraprofessional home visitors and other materials for parental use. The program put out a guide for parents and one for parent coordinators for use by groups of parents of preschool children. Those are still being field-tested, and the project staff had a healthily cautious attitude about making claims for them. The parenting instruction includes emphasis on nurture and care, as well as on education and discipline. On the basis of a needs assessment, the staff developed a videotape for use in this aspect of the program.

A reanalysis of the original HOPE followup study found that children of all levels of ability progressed beyond their expected rate of development. In grades 3-7 they had higher grade-point averages, better attendance, and greater overall achievement.

The project is now preparing to study the relationship between parents' characteristics and students' achievement. For this phase of the project, they are in the process of refining downward a rich and comprehensive instrument for interviewing parents.

Through a seven-State survey, the Parenting Research Program will seek to find out what works effectively for parents and children elsewhere, what is unique to this region, and what parts of the program that they are developing here are usable elsewhere. There is an inter-

disciplinary advisory task force which includes professional educators, health specialists, social welfare professionals, and school people; the site team suggested PTA representation.

This is a particularly exciting and obviously worthwhile project. It promises to amass important and practical knowledge about the development of very young children through parent education in a cost-effective model which is easily adaptable for school systems. Meanwhile, its impact will already be felt through the dissemination of the Home Visitor Training Kits to State Education Agencies and other institutions working on home/parent projects; through the soon-to-be published versions of the learning files, and through the publication of the guides for parents and of other materials.

This project is a fine example of a direct R&D service which fits a regional need and also has the potential for nationwide use.

Personnel Management and Affirmative Action

It was the visiting team's impression that staff morale was good at AEL and that the administration was aware of staff potentials, interests, and skills. Persons at the Lab have moved up to positions of greater professional responsibility; and it is a practice of management to give temporary financial raises to staff members whenever they assume additional or higher level responsibilities.

In the area of affirmative action, AEL is making slow progress in recruiting and hiring more minorities. The team understands the complexity of the problem but strongly encourages AEL to begin making more positive gains in this area. The team suggests that the Lab expand its recruitment efforts to include colleges and universities in the large urban centers, black professional journals and organizations, and those NIE-funded labs and centers which are currently involved in training minorities and women for R&D. In addition, the team suggests that AEL closely examine the criteria currently being used in its interviewing and screening process.

Financial Management

The financial management of AEL seems to be very satisfactory. The management reporting system appears more than adequately to monitor ongoing operations, and it offers as well a comprehensive picture of the Laboratory's fiscal affairs. The report of the external auditors and the observations of members of the Executive Board confirm this impression.

There is one problem facing all the laboratories that applies to AEL with special force. This has to do with the accumulation of unrestricted monies to tide the institution over fallow periods between grants or contracts; to stimulate exploratory ventures; and to cover the costs of capital improvements and replacements. In most of the laboratories the chief source of such monies has been the management fees attached to federally funded contracts. These fees are now discontinued in the case of monies coming from NIE. This is an especially heavy blow for AEL, since more than 80 percent of its current funding comes from NIE. The Panel understands the seriousness of this threat to the fiscal health of AEL and urges that it be countered; we recommend either a reestablishment of such fees or some other contractual arrangement that would assure the continued availability of such a modest but essential fiscal resource.

The Panel notes that AEL has suffered a recent reduction in funds that threatens its capacity to provide the amount of administrative and support services that such a facility needs. We understand that a special request has been made for supplemental monies to assure that such essential services are not curtailed. Though the response to that request has been encouraging, the amount requested has yet to be aliocated. We urge prompt action on this request to relieve the uncertainty and insecurity that the present situation understandably evokes.

A peculiar and even midly humorous situation appears to have been created by NIE's present policy respecting the ownership of equipment purchased with Government funds. Apparently, AEL is powerless to sell, trade-in, or even discard such equipment, much of it now obsolete, because the Lab has not been granted ownership of it. Thus AEL is in the ludicrous position of having to store useless pieces of equipment, some of it in specially rented space, while at the same time being unable to purhcase needed replacements; for the Lab does not have the contributions to cost normally coming from trade-ins or resale. We understand that NIE is aware of this anomalous situation and has vowed to correct it. We urge prompt action on that vow.

General Comments and Summary

We were impressed by the products of AEL. Based on its performance in the past, the programmatic evolution of its work, and the demonstrable impact it has had on its region and beyond, we are confident of AEL's ability to perform quality work as an institution operating under a long-term commitment from NIE. We reiterate our positive response to the collegial flavor of the Lab and to the easy way in which the professionals trade off their skills in support of one another's efforts.

We believe it is appropriate to comment on institutional size. AEL is not exactly near the point where that becomes an immediate concern. However, it is related to an issue that NIE does need to address and that the Lab might do well to consider in determining how extensively it will pursue non-NIE funds in the future. While searching for and getting other short-term monies will always create problems, the institution can probably take on more activity to its own benefit and to the region's.

One of our comments reflects back on the Panel as a whole. We felt concern over the Lab's rather dramatic response to a comment we made in our earlier assessment of the AEL's 5-year plan. Hoping to get further clarification, we noted that the plan did not seem to justify the level of effort projected for needs sensing. Partly in response to our observation, AEL chose to curtail rather sharply the effort it had planned and to undertake it not out of program funds, but out of management overhead. We were not seeking such a response, and, as a Panel, we need to be mindful of the power of what we say once it is formalized.

We must make one final note. An unexpected impact of the Lab evidently lies in the function it seems to be performing with respect to staffing the region. The Lab has recruited outsiders to Appalachia who have left the Lab but still remained in the region. Thus, AEL performs an important service by allowing a process of acclimatization to take place. This is likely to have long-term productive benefit for the region as a whole that is somewhat different from that of the direct service that research and related activities provide.

CEMREL, Inc.
St. Louis, Missouri

Institional Definition and Mission

CEMREL considers that its mission is to improve "the effectiveness of instruction in the schools of the nation and the region." This is to be done through "the development and application of curricular and instructional systems... provision of relevant R&D information to the appropriate agencies, institutions, and individuals in the region...the organization, development, and maintenance of technical assistance systems and networks in the region, and...the development and strengthening of regional R&D activities directed at school improvement." In its Interim Report the Panel expressed confusion about CEMREL's mission because it seemed to have the attributes both of a laboratory and a center. We were also unclear about that way the balance was being struck and about whether the governance of the Lab was designed to reflect national or regional concerns, or a mixture of both. This site visit has suggested to the members of the team that, while the Panel correctly perceived this mixture of purposes, it has come about for good reasons, and we need not regard it as either confusing or disadvantageous.

CEMREL started out as a clearly regional institution serving the eastern half of Missouri, the southern half of Illinois, and the western two-thirds of Tennessee and Kentucky. It had offices in each area and a large Board broadly representative of the area's educational interests. Responding in part to shifts in the U.S. Office of Education's (USOE) interests, CEMREL pulled back from its involvement with the region and developed a program of large-scale curriculum development, particularly in mathematics and aesthetic education. The program was geared to having national impact, even though much of the trial work was to be done in the region. Paralleling this shift, there was a progressive decrease in the size of the Board and a shift in its function away from strict representation and toward a more normal corporate board structure of responsible individuals. (As we note below, though, some regional representation has been retained.) CEMREL also established an extensive system of advisory groups; these were to provide advice both to the Board (for a time in the form of a "visiting committee") and to individual projects. These advisory groups seem to have been designed more to provide representation of the relevant scholarly fields and points of view than they were to reflect regional interests, but the representation of potential users does soften that impression somewhat.

However, CEMREL has been affected by NIE's recently renewed emphasis on dissemination and the regional exchange system and other indications of the value of efforts to serve the region. CEMREL has moved to reestablish contacts with State and other agencies that had been attenuated or broken during the earlier shift of emphasis, and to extend its service area to a number of additional states. This stimulus to attend more to the needs of the consumers of R&D products and services coincided with another change: the recognition within the curriculum development movement itself (and particularly among CEMREL's staff) that if their efforts were going to be widely used, they would have to pay much more attention to needs and interests of potential users and to the conditions and constraints under which they operate. These

forces are leading to an impressive renewed effort at increasing collaboration with and responsiveness to the region's educational agencies. At the same time, there is still a conviction that the Lab should continue to carry out sophisticated programmatic R&D, which could have a national impact as well as a regional one.

We know that some conflict might exist between the goals and styles of work involved in large-scale R&D and those required to provide responsive service to local needs. We were impressed, though, that CEMREL's staff have apparently learned the lessons on that score taught us during the past decade. We feel this group has as good a chance as any to demonstrate that a sophisticated research capacity can help rather than hinder an effective service program. In other words, we think it possible that a healthy coexistence is possible between a capacity for nationally useful research and regional service if careful attention is paid to the potential tensions and questions of balance. We think that CEMREL is making a promising effort at testing this proposition.

Institutional Governance, Accountability and Self-Evaluation

The site visit team was able to meet with the officers of CEMREL's Board of Directors and was impressed by their involvement and dedication. If these officers are representative of the Board as a whole, the Board is well integrated into the Lab.

CEMREL currently has a 14-member Board of Directors, 9 of whom reside within the Lab's region and represent a broad range of educational interests. The other five are members-at-large who reside outside the Lab's geographical region and who, in some cases, represent fields of interest other than education.

The Board meets quarterly. In addition, each of its members belongs to a standing committee. These committees meet more often and give the Lab's staff input on legal matters, compensation, finance, external relations, and personnel practices and policies. The visiting team received the impression that while the Board as a whole is substantially involved in defining and reviewing CEMREL's programs, the standing committees are concerned with the Lab's institutional accountability and needs-sensing process. In addition, each Lab program has its own National Advisory Committee to assist with program accountability and direction. Regional accountability and self-evaluation are maintained through the involvement of a National Council of Advisors, who, independent of the staff, advise the Board.

The team was favorably impressed by the collegial relationship between the Board officers and Lab management. As a group, these people displayed an aura of confidence and stability, as well as a definite sense of direction and purpose.

The Board was also instrumental in assisting CEMREL in improving its affirmative action policies and practices.

The Institution's Activities and Projects and Their Impact and Usefulness

The activities of the Lab are organized into work groups, and these in turn are formed into two larger groups or divisions. The latter roughly reflect that distinction between nationally oriented programmatic research and regional service discussed above. They are the product

development groups, concerned with curriculum and instructional systems, and the school and community services group, concerned with bringing the results of R&D to bear on the problems of the region's schools. In the area of product development there are two NIE-funded programs: research and curriculum development in the arts and humanities and in math. There are non-NIE funded groups working on Special Education and Lifelong Learning. In school and community services NIE is funding a new Urban Education program, which is a collaborative effort with the State Department and representatives of the region's 20 largest urban systems to see how R&D resources can help meeting their needs; and it is funding the RDx and the Research and Development Interpretation Service (RDIS) projects. This division also includes a Right-to-Read Program project and Title IV By-Pass program, which channel funds to non-public schools in Missouri. The Lab has two other NIE-funded groups not included in the larger divisions: The *Mehr Licht* Policy Studies Group, based in Chicago, and the Women and Minorities R&D Training Project.

Because of the time constraints on our visit, we only had a chance for a brief overview of these many projects. Therefore, we will not try to provide an extensive description of them here; instead, we will try to give our most important overall impressions. We found the two NIE-supported curriculum efforts to be very impressive. Both have existed for at least a decade; and it is clear that both have been deeply concerned with issues of scholarly integrity and with extensive efforts to involve teachers who would use their materials. We were particularly impressed by the research effort which the Arts and Humanities group is now mounting. This seems to have been motivated largely by the group's recognition of the difficulties impeding the implementation of a comprehensive curricular program in what many would see as a new or additional or even peripheral field for elementary schools. Much of this work seems to be at the planning and exploratory stage, and thus cannot yet be judged successful. However, it does seem a good idea to look carefully at the schools' current conditions and constraints in the area of the arts and humanities—and at constraints involved in the school personnels' conceptions of these areas. This effort could lead to useful general insights into improving strategies for future development and implementation in regular or "off-beat" curricular areas. This is work of the highest national priority, and it makes good sense for it to be carried out by an institution such as CEMREL, for CEMREL has an extensive history in the field.

The work in math seems not to face quite the same practical problems of implementation. However, this does still have to cope with some annoying "Catch-22" type constraints on its ability to publish materials so they can be field-tested and with uncertainties about longer-term Federal policy on curriculum development. But in any case we were impressed by the math group's enthusiasm and by the charm and ingenuity of the materials we saw. The non-NIE product development projects in special education and lifelong learning are new starts, so they are hard to judge; but we felt that they have made good beginnings.

The *Mehr Licht* Policy Studies Group is only partly supported by NIE funds (constituting about one-fourth of its $400,000 budget last year). This group has been doing work that involves obviously important issues and that has yielded some very provocative results. It has dealt with the decline of test scores; the implications of alternative techniques for allocating Title I funds; the response of large urban-system

school budgets to declining funds and enrollment; the history and implications of the concept of individualization; the lessons to be learned from large-scale research on the effects of the allocation of classroom time and resources; and an assessment of the minimum competency movement.

The *Mehr Licht* group clearly deserves support. The Panel had expressed some puzzlement about the *Mehr Licht* group's role in CEMREL. We felt, though, that the Lab's leadership sees it as a high quality resource that CEMREL's other groups can call on when they need special analytical capacity. It could be of service to regional agencies. We found, however, that the *Mehr Licht* group has been working mainly on Federal contracts; it would probably take some marketing to develop a regional demand for the group's services. We believe that with its sophisticated analytic capacity, the *Mehr Licht* group could also represent a somewhat fancier form of anticipation of future problems, or needs sensing, than we have noted at the other laboratory.

The Panel's concern about regional needs sensing is also addressed by the work of the Regional Joint Planning Group of the Urban Education Program. The team was pleased to observe that this group is currently identifying the needs of 20 cities, plus the State departments within CEMREL's region, and that it is matching services that CEMREL can offer. CEMREL hopes to use these identified needs to begin negotiating with these cities and States for the funding of some of the program's regional components.

The team also felt that the work of the RDIS plays a valuable role in dissemination efforts. Its role is to take priority issues identified by the RDx, review the research available on them, and translate this into language that practitioners will understand. The RDIS still needs to be concerned about how to obtain evaluative feedback on the effectiveness of its efforts. However, it would appear that this work, to be aimed at all levels of practitioners, will be valuable and interesting.

Personnel Management and Affirmative Action

Staff morale at CEMREL appears to be good. The staff are of high quality and enthusiastic about their programs.

However, the team had some mixed reactions to CEMREL's affirmative action program. The Lab has made progress since 1977 in the hiring of women and minorities. But at the managerial level the Lab has only one minority employee, and the total number of females has declined. This, coupled with the team's concern over the difficulty of finding employment for an intern in the Women and Minority Program, made us marvel at the "Catch-22" of it all.

The Women and Minority Training Program has recently undergone a change in directors and is currently still deciding on the orientation of its program. The visiting team hopes that CEMREL and the program director will carefully consider the direction of that program. They should start questioning the need to train people for managerial positions within the R&D structure if, as was the case within their own Lab, those persons have limited opportunities for placement. The visiting team is not suggesting that CEMREL abandon the effort; we think, rather, that the group should give some consideration to other alternatives that might offer more opportunities.

In addition, we suggest here, as elsewhere, that systematic linkages be established with other laboratories and centers and R&D institutions so all possible opportunities are matched with available applicants.

Financial Management

We were given a good description of the evolution of the financial management system of CEMREL by the Treasurer, Board member Charles Duffy, by the Assistant Vice President for Administration, and by the Comptroller. The system now provides complete and current information on expenditure by program. This is fed back to management and staff members along with warnings if the budget is being exceeded or deadlines are in danger of not being met. The Board also receives fairly extensive extrapolation of the institution's future financial condition—or alternative conditions—as a basis for planning and oversight. We were satisfied that CEMREL has a sound, flexible, and effective system for financial control and management.

General Comments and Summary

The site visit team felt that the visit was helpful in clarifying some of the issues raised by the Panel in its Interim Report. CEMREL impressed us as an R&D institution with the kind of experience and integrity that would be a shame to waste. The Lab is well managed, and it is producing R&D efforts that will have a demonstrable impact both inside and outside its region. We reaffirm the Panel's recommendation that CEMREL and NIE now proceed to work out a long-term institutional relationship.

An element of CEMREL's history that strikes us as being worthy of further comment is its earlier use of a "visiting committee." This was a subgroup, with some additional participants, of the National Advisory Committee, reporting to the Board of Directors. As we understand it, that committee included a number of highly respected specialists in CEMREL's fields of interests. They periodically came to St. Louis, spent considerable time visiting program staff and reviewing their efforts, and then prepared a report and a set of recommendations to CEMREL's management and to the Board. The USOE project officer participated in the visiting committee's process. In addition to project by project judgments, the committee addressed institutional and managerial questions in its recommendations. We understand that CEMREL is considering a revival of this mechanism, if the resources to support it can be found. We recommend that a close look be taken at this device, both for its value as an accountability mechanism for CEMREL and for its possible application at other institutions. We think that if the device is revived, particular attention should be paid to ways of using it to represent regional interests as well as the interests of specialists in the Lab's fields of interest.

FAR WEST LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT

San Francisco, California

Institutional Definition and Mission

The Far West Laboratory for Educational Research and Development (FWL) is an institution established under a joint-powers agreement among California, Nevada, and Utah to provide educational research and development services. The Laboratory has a well-developed sense of its existence as a research and development institution addressing the needs of its region and beyond, as demonstrated by its vigorous activity in seeking funds to provide information and services to its constituents and in its equally vigorous efforts to develop quality products.

The mission statement, as written, is very broad, which caused some feeling among the site team members that the Laboratory had not sufficiently defined the criteria for evaluating proposed projects as valid items for response by the Lab and for inclusion in its overall program. Criteria for identifying purposes for entering into projects, sources for funding, and the magnitude of proposals were not visible to the team. Nor was it clear to us exactly what steps are taken to preclude the writing of proposals whose primary purpose is to obtain funds, rather than to address a particular regional need.

The nature of the Lab's mission in relation to its goals and objectives for the future, given opportunities for growth and expansion (through carryover and other funds, for example), was considered by the team. A mechanism for making decisions about growth consistent with the stated mission should be developed. (We learned after the debriefing session that such procedures did exist. The reason we were not exposed to them was that we did not have a separate session with the Associate Director responsible for assuring that program initiatives are congruent with governance-sanctioned mission and program definitions.)

Institutional Governance, Accountability, and Self-Evaluation

The governance of FWL reflects its creation by a joint-powers agreement among public agencies in California, Nevada, and Utah. The members of the Board of Directors are appointed by the participating agencies according to a numerical distribution and at-large members by the Board of Directors, with recommendations from its External Relations Committee. As the Panel for the Review of Laboratory and Center Operations observed (and the site team concurs), the Board of Directors is not as representative of the diversity (ethnic, racial, or sexual) of the region or of the constituency groups (teachers, community, etc.) as it should be. We acknowledge the use of the at-large membership and the attention to composition by the External Relations Committee recommendations, but these numbers are so far insufficient to create a more diversified Board. The Board might address (1) the review of and makeup of recommendations for altering the joint-powers agreement process for Board membership; (2) the communication to its member agencies of its concern that they give greater attention to diversifying their representation; and (3) the reflection of greater diversity in appointments by the Board. Since FWL leans heavily on its Board as a participant in the

identification of regional needs and the establishment of program priorities, it would be productive to have a Board more representative of the region's population and of consumers of the Lab's services and products. The Board should, at the least, consider criteria for representativeness of the members it appoints. The principal thrust of this concern, however, given the manner in which the Board is constituted and chosen, must be directed to the participating agencies who nominate the Board members rather than to the Lab itself.

Our discussions with the Board showed their involvement in the governance of FWL. Their development and adoption of the mission statement to serve as the outline of FWL's scope of effort, and of the planning guidelines to serve as indicators of problem areas on which to focus the R&D process are intended to reflect their assessment of local, regional, and national needs. Although the site team commends this effort, it recommends that FWL develop a more systematized insitutional method of identifying needs and priority problem areas. Such activities as deliberate and formal communication with client groups (for example, teacher organizations, parent organizations, professional associations, school districts, and universities) would strengthen the dissemination, feedback, additional research, and priority strategies of FWL. Such an outreach might also contribute to coordinating efforts with other organizations in the region that are addressing similar needs and problem areas. The team further recommends continued efforts to develop procedures for communicating with representatives of ethnic minority groups about program concepts and development throughout the several programs of the Lab.

The emphasis of the FWL Board and staff on the participatory mode and holistic approach to R&D seems well suited to a regional as well as a national program of meaningful efforts to address educational improvement. The use of advisory groups and their onsite involvement in schools and classrooms are an integral part of this mode in many of the projects. The site team suggests that each appropriate project reflect attention to the participatory mode in its development and implementation. The FWL's Board and staff expressed concern about the Federal funding process, which in their judgment militates against institutional decisions on matters of substance and priority in program development, a serious constraint to the implementation of genuinely participatory assumptions and premises. The team concurs that this area must be addressed by NIE and Federal funding policies.

To further its governance responsibility, the Board and staff should introduce processes for regular evaluation of their priorities and for review of proposed and ongoing programs and projects in terms of those priorities. Such processes would encourage a more formal coordination and communication mechanism among the staff and would aid the Lab as an institution in adhering more closely to its mission.

The institution's accountability for fiscal operations and personnel is excellent. However, the accountability process by which the Board and the Executive Management determines the impact of the diversity of projects, the coordination of multiple projects, the development of linkages, and the reporting and dissemination of the results (those not in a diffusion network) seems less organized. These concerns could be related to the multiplicity of projects and the difficulty of assessing each formally.

The site team commends an active and involved Board. The Director and staff are

committed through leadership to meeting local, regional, and national needs.

The Institution's Activities and Projects and Their Impact and Usefulness

The programs and activities of FWL extend well beyond the immediate purposes of NIE and are supported, therefore, by a number of other appropriate agencies. We would note that in a number of instances, such as career education, dissemination, and equity, there is a high degree of complementarity between the activities funded by NIE and those supported by other agencies. Our comments, reactions, and observations below, however, are reserved to those activities supported by NIE. Given the scale of FWL and the time available for discussing and developing this report, not all the activities could be reported here; but all major programs are touched on.

Schooling In its program on schooling, the Laboratory is engaged in a series of studies designed to break away from the research paradigms that have dominated educational research on teaching for the past several decades, most from the field of educational psychology. They are quantitative in methodology and experimental in design. Contrasting this more established approach, the research being carried out in the Schooling Programs draws heavily on disciplines other than educational psychology. Its sources are naturalistic observations, interviews with teachers, and intensive examination of a small number of classroom settings. Some of the research departs even further from the classic paradigm by involving teachers themselves in both designing and conducting the studies. The Panel notes with approval these efforts to diversify the methods of seeking an understanding of classroom affairs. In particular, we commend the attempt to increase the involvement of teachers in educational research.

The proposal to develop what the staff refer to as "an ecological theory of teaching" is part of this program's general movement away from the standard tests and measurement approach to educational research. The interdisciplinary character of this effort is laudable, and some of the early products of this portion of the program look promising. At the same time, we note that interest in so-called ecological notions is fast becoming the latest educational fad. We hope that the staff of the Schooling Program will be vigilant about the work in which it is engaged, making a persistent effort to avoid the excesses of expectations and language that often accompany sudden popularity.

Adult Satisfaction and Productivity The Lab's experience-based career education activities are of clear value and importance. They appear well tied to other activities and models in use across the country. The effort relating to work and values has considerable potential. It is of obvious importance, given the rather slight attention of career education efforts to this topic and the sharp contrast between the views of work expressed in educational and curricular goal statements on the one hand and, on the other, the contemporary literature suggesting pervasive malaise among many segments of the labor force. Although the staff freely acknowledged the complexity of the definitional and contextual issues involved, they have embarked on a systematic and reasonably paced effort that should bear useful fruit.

Dissemination/Utilization The Laboratory has a variety of dissemination support and analysis activities (as distinct from dissemination

responsibility per se). These appear to be well conceptualized. They are visibly linked to individuals and the work being done elsewhere, and they demonstrate an awareness of the complexity of the issues, barriers, and technical difficulties of the entire dissemination/acquisition/utilization concern. We would like to comment, however, that the tendency of dissemination researchers and support personnel to use somewhat arcane language or jargon can add to complexity rather than reduce it. This said, it is apparent that the Lab has considerable competence in the substantive area of dissemination and utilization. The projected work in that area gives promise of beneficial effects.

Quality of Life The project activities in the Quality of Life program represent a modest yet ambitious effort along a complex, exciting line of action to influence and eventually modify the overall conceptualization of schooling. The current emphasis on environmental/energy concerns and their far-reaching implications not only for society but also for learning and the schools underscores the significance of the work, but the staff members seem aware of the problems that raise immediate questions about how much real effect their efforts will have. We did have some concern, perhaps as a consequence of the grouping of the presentations, that some of this program's activities might have been chosen in response to available funding opportunities, instead of deriving from the Laboratory's defined mission.

Beginning Teacher Evaluation Study This is a multiyear study of the applications of knowledge generated from research on teacher and student classroom behavior to the practical improvement of instruction. The 1st year of the study, carried out in California classrooms, evaluated effective classroom instruction and developed hypotheses about the relationship between teaching performance and pupils' learning, about the relative influence of teacher characteristics and teaching environment on professional performance, and about correlations between pupil characteristics and backgrounds and student learning. The results of this research contributed to the certification of teacher training programs being developed by the California Commission for Teacher Preparation and Licensing. One major finding on academic learning time—that students achieve more when they spend more time learning—led to the development of an academic learning time model of teacher instruction. The extensive data base collected for these studies is being taped for documentation at low cost and will be extremely useful for supplemental studies.

Class Size Project The FWL staff working on this project are doing a meta-analysis of class size literature to see if class size does make a difference in learning. They will also conduct a participatory classroom study involving a consortium of teachers, teacher educators, and researchers who will meet regularly to help design the study, react to findings as they emerge, and synthesize and write up the findings. They will try to find out not only whether students learn more in smaller classes but also, if they do, why. They will observe what teachers do in a small class to see whether it does make a difference in learning and to try to pinpoint what it is that makes that difference. They will ask what a teacher can do with approximately 15 children that she or he cannot do with 25 or 30. They will look at ways in which instructional group size can be reduced in "large" classes through aides, tasks, "staggered" reading programs, etc. They will also commission papers on the economic and policy issues of class size and instruction.

A significant aspect of this project is the "real world" outcome and practical use of the basic research.

Personnel Management and Affirmative Action

There is clear evidence that the administration of the Far West Lab has made and is continuing to make a concerted effort to meet affirmative action goals. Indeed, the data presented to the site team indicate that in almost every job classification those goals have been met, or were even exceeded. In both professional and clerical staff categories, the most underrepresented group in terms of availability as potential employees, now appears to be white males!

The relative instability common to freestanding research and development institutions such as the Far West Lab can create personnel problems that seriously affect staff morale and day-to-day operations. The administration of the Lab and the personnel committee of its Board apparently recognize this potential problem. Several policies have been adopted to lessen the effects of this instability. The first general policy is to seek a flexible staff, one that can adapt to changes in institutional goals and external funding policies. Second, funds have been set aside within the Lab to provide for continuity of budgeting. These funds allow FWL to cover "gaps" in budgeting between the termination of one grant or contract and the beginning of another. Thus, principal investigators and staff are assured continuous income for as long as 6 months during slack periods. Third, the administration keeps the staff fully informed of the risks associated with future funding. Employees are routinely notified of the termination date associated with the expiration of the contract on which they are working. They are apprised at the same time of the likelihood of continued or new funding. Though this could seem to engender increased insecurity among the staff, it appears to have the opposite effect. The openness of communication between administration and staff goes a long way toward reducing the uneasiness commonly found in institutions of this type.

In addition to personnel practices specifically related to the vagaries of institutional funding, the administration and staff, working together, have developed an elaborate personnel policy covering the usual topics of salaries, benefits, merit reviews, promotions, and the like. These policies are apparently working well, for there appears to be no history of serious employee dissatisfaction (for example, the grievance procedure has never yet been carried to its final step), and the staff's morale, as witnessed by the site team, appears to be high. The team is enthusiastic about the leadership/management internship program FWL developed for women and minorities. In summary, the Panel team applauds the administration of the Lab for the professional way in which it handles personnel matters.

Financial Management

Fiscal year 1978 marked FWL's 3d successive year of support in excess of $6 million. NIE's share of that is slightly more than $3 million. The United States Office of Education (USOE) provides an additional $3.2 million and other agencies another $500,000. In short, the Laboratory is substantially larger than NIE's direct investment in it, a circumstance that distinguishes FWL from some (although not all) the other educational laboratories across the country.

The team commends the Laboratory on the design and implementation of its financial management system. The availability of detailed weekly and monthly fiscal reports to project directors and laboratory management and of quarterly reports to the Board of Directors helps to ensure a high degree of fiscal and, therefore, program accountability. We were impressed with the care with which the Lab's financial managers have attended to two key concerns, the investment portfolio and the budget process for tiding over key employees between projects, should that become necessary. In this regard, however, we are quite concerned about the reduction of fee income that accompanied the shift from a contract to a grant instrument. The fees earned by the Laboratory are a key element in their total financial management approach. The long-run consequences of the lost fee income are serious for FWL's occasional facility expenditures and equipment, the capacity to sustain key staff during possible slack periods between grants or contracts, and the maintenance of needed levels of working capital.

The Laboratory is housed in a building that was procured and renovated with Federal construction monies available some years ago. The facility appears to work well for the Lab, affords opportunity for some program growth, and provides a pleasant working environment.

General Comments and Summary

The Panel team ended its 2-day visit with a clear sense of the Far West Lab's vitality and strengths. The Lab has moved through several phases of development and stands today as a strong and relatively independent institution. Much of the credit for the current health of the Lab appears to be shared by a clear-headed administration and an intellectually vigorous staff. Although the Panel team is not in complete agreement about the clarity of the Lab's mission, there is no doubt that most of its present work promises to be of enduring value to educators throughout the country. The site visit team reaffirms the Panel's interim recommendation that NIE and the Far West Lab establish a long-term relationship.

MID-CONTINENT REGIONAL EDUCATIONAL LABORATORY

Kansas City, Missouri

Institutional Definition and Mission

Throughout its history, the Mid-Continent Regional Educational Laboratory (McREL) has had the mission of serving the educational needs of the geographical region in which it is located. Originally, that region was defined to include western Missouri, Kansas, Nebraska, and Oklahoma. An effort is now being made to expand the definition to include North and South Dakota, Wyoming, and Colorado. The combined regions, old and new, make up the bulk of what is commonly called the Great Plains region.

Two features of this area that have obvious implications for its educational programs and for the kinds of services McREL might provide are

its rural nature and the geographical isolation of many of its communities. These characteristics entail educational problems such as small school size, fragmented and weak communication links among various educational units, and lack of familiarity with new educational developments—particularly with the bearing of educational research on local educational problems. At the same time, this region shares with other regions in the Nation a concern with such common topics as educational finance, mainstreaming, multicultural education, professional development of teachers, and competency testing. An agency like McREL is faced with the task of responding to both the unique and the common educational needs of the region.

Before McREL was established, hardly any intermediate agencies served the region's schools. Therefore, the initial strategy of the Lab was to establish a network of area service centers throughout the region, with a particular focus on reading, basic skills, and media support. Because this effort at local help did not coincide with the directives emanating from the U.S. Office of Education (USOE), that initial strategy was abandoned, and the Lab was encouraged to concentrate instead on developing and disseminating specific educational products. McREL is now making a serious effort to return to the idea of local service. In the interim, a number of intermediate agencies have developed within the region, lessening the need for McREL to respond to individual schools and classrooms. Consequently, the chief targets of McREL's renewed mission are those intermediate agencies themselves, many of which were instituted by the various State departments of education, which now support them. What specific topics it might work on and what mechanisms it might use to fulfill its mission are questions McREL is trying to answer with its present planning funds.

Institutional Governance, Accountability, and Self-Evaluation

The original 18-member Board of McREL dwindled over the years as funding was cut. The present Board has nine members, all serving 3-year terms; many of these members have served on the Board since its inception. These persons, who presently pay all of their own expenses connected with participation on the Board, are to be applauded for their sustained support of the Lab.

Presently, State departments and institutions of higher education are adequately represented on the Board. However, the Board membership entirely lacks elementary and secondary teachers and minority representatives. The Panel team strongly recommends that, as the Board expands to its original size, it include as members elementary and secondary teachers, as well as representatives of the minorities that are prominent in the region—blacks, Chicanos, and Native Americans. We also urge that the number of women on the Board be significantly increased.

The Board, which meets quarterly, is responsible for policy formulation. It also oversees the hiring of professional staff and other personnel practices. The Panel members were impressed with the active involvement of Board members in the development of the proposed 5-year plan for McREL.

The Institution's Activities and Projects and Their Impact and Usefulness

At present, McREL is concentrating on formulating a 5-year plan by developing a step-by-step procedure to identify the problems it should address and the most effective strategies

for solving those problems. The first stage in the process was a pilot planning project involving Kansas and Nebraska. The second step involved personal visits and interviews with selected officials in three of the four States newly included in the regional definition (North and South Dakota and Colorado). The third stage, which the Panel team personally witnessed, was a presentation of the results of stage 2 to the Board of McREL and a discussion of how best to proceed. The fourth stage will require the involvement of groups that have not yet been contacted within the seven States. These will probably include representatives of professional organizations, citizen groups, commercial agencies, and the like.

The Panel team was impressed by the orderly manner in which McREL is proceeding with the planning process. Although it is too early to tell what the 5-year plan will look like, it is evident that McREL is making a sincere effort to touch all bases in its search for a defensible and sensible program and not merely expand the list of things it might do. It is clear that the number and range of problems on which it might work are greater than the present or even the future capacity of McREL to fulfill, and therefore a major task involves paring down the list of items on the Laboratory's agenda. Closely associated with the goal of keeping future plans within reasonable bounds is that of developing an organization that is sufficiently flexible to respond to the changing needs of the region. The Laboratory's staff members seem fully aware of the need to keep its goals both realistic and flexible.

To serve better the extended region with which it intends to work, McREL recently established an office in Denver, at which both the Deputy Director and the Director of the Mid-Continent Regional Exchange are located. Travel patterns within the Great Plains region, particularly in the northerly States, make Denver a logical location for a staff that will combine frequent visits to outlying areas with the planning of conferences and other meetings of regional participants. Although it understands and approves the reasons for the establishment of this second site of operations, the Panel team is also aware that physical separation of the parts of an organization often causes problems in communication and the coordination of efforts. It is not yet clear how McREL will address such problems should they arise. One alternative is to split the territory. But, given the small size of the total organization, it is difficult to see how this might be accomplished without sharply curtailing the goals of the organization as presently envisioned. The Panel trusts that this issue will be addressed in the Lab's 5-year plan.

Because of McREL's size, which is not projected to increase dramatically, it is evident that the type of help it will be able to offer the region will be focused on what the staff refers to as intermediate agencies, as contrasted with individual teachers and schools, and will consist primarily of facilitating communication throughout the region and of providing information useful in solving locally identified problems (so-called "decision-oriented" research). Obviously, the McREL staff are not equipped to undertake the research that will generate the needed information. Consequently, one of their chief functions will be to identify personnel within the region who will be willing and prepared to respond as those needs arise. The McREL staff seem confident that such resources are available within the region. The Panel team endorses this linkage role as envisioned by the staff but does not completely

share their confidence about its feasibility. While recognizing that help from beyond the region could be greeted with suspicion, the team hopes that local pride will not prevent McREL from searching for the best possible solutions to the problems it will face, regardless of where they might be found.

The recent establishment of the Mid-Continent Regional Exchange and its attachment to McREL seem to fit nicely with the emerging plans of the Laboratory. Clearly, communication within the region and between the region and the rest of the Nation stands out as a persistent issue that the regional exchange is designed, in part, to address. The recent conference on women's equity sponsored by the Exchange and the emerging plans for a conference on rural schools are excellent examples of the kinds of services that such an Exchange might provide. The Panel team is encouraged by the high quality of professional leadership within the Exchange. We envision the Director of the Exchange working in close collaboration with the Director and Deputy Director of the Lab. Ideally, the activities of the Exchange and the Lab will reinforce one another.

Personnel Management and Affirmative Action

McREL has a small staff of six professionals and a full-time secretary. The professionals have the titles of Executive Director, Deputy Director, Senior Associate and Director of the Mid-Continent Regional Exchange, Field Service Specialist, Program Assistant, and Business Officer. Tentative plans call for an expansion of the professional staff to as many as 12 full-time employees, but the officers of the organization do not envision further growth.

The Panel members feel that McREL is fortunate to have attracted to key positions—Deputy Director and Senior Associate—such highly qualified staff members. We recognize that all members of McREL's staff, new and old, serve the organization at some personal sacrifice, for the salaries paid by McREL are understood to be significantly lower than those for comparable positions elsewhere. Although we admire the willingness of the McREL staff to make this sacrifice, we regret that it is necessary.

The Director is to be commended for his efforts to employ a minority person to fill a position on the professional staff. We understand that the job was offered to two persons—a black and a Native American—who refused the offer in order to accept more attractive posts elsewhere. We are not optimistic about the future success of such efforts, given the fact that McREL's salary structure is not competitive with other organizations in the area. We hope that this discrepancy can be corrected soon.

The Panel team notes with approval that the organization's Business Officer, a black woman, has been in a position of leadership since the Lab was formed. We were also pleased to learn that to date the Lab has had no litigations or grievances filed against it.

The Panel team regrets that McREL, as all other laboratories and centers, cannot offer more job security to its employees.

Financial Management

McREL, once the recipient of one of the largest grants from USOE, now receives the smallest of all the NIE grants to the laboratories and centers. This drop in the Lab's financial fortunes appears to be the result of its having

chosen to remain true to its original mission of providing services to the clients in its region. To stay alive, the Lab has had to turn to sources other than NIE for support. These have included funds from the Elementary and Secondary Education Act (ESEA) and other projects for cities and States within the region. It is significant that at least one of these projects, the Cooperative Urban Teacher Education program, today operates on its own with the participation of 21 colleges.

McREL has a modest financial reserve, sufficient to cover its current fiscal obligations to employees but by no means large enough to be used as startup money for new projects.

General Comments and Summary

The Panel team could not help noticing a certain chariness among the staff of the Lab as they go about developing a 5-year plan. This attitude of caution, expressed as a kind of guarded optimism, appears to stem from earlier experiences that individual members of the staff have had with inconsistent directives and changing signals from USOE and, later, from NIE. Moreover, this guardedness seems not to be limited to staff members; it apparently extends to potential consumers of the Lab's services, as well as to members of its Board. Like children who have been burned once, all who are involved in this latest effort of McREL to reestablish its status as a bona fide member of the laboratories and centers network exhibit a kind of timidity that is as understandable as it is lamentable. The Panel team hopes that NIE will be particularly sensitive to this attitude as it moves forward with its negotiations with McREL and will not mistake natural caution for an absence of enthusiasm.

One encouraging note in the renewed relationship between McREL and NIE has been struck by the appointment of an institutional monitor who brings to his task a deep sympathy for and an understanding of the kind of mission in which McREL is engaged. The Panel team was pleased by the positive comments that were made about this appointment and hopes that the present monitor, or a person with a comparable orientation toward the Lab's mission, will be on hand to work with them in the months ahead as they attempt to fashion a long-term proposal that will be responsive to both regional needs and NIE priorities.

NORTHWEST REGIONAL EDUCATIONAL LABORATORY

Portland, Oregon

Institutional Definition and Mission

The Northwest Regional Educational Laboratory (NWREL) considers itself a regional R&D agency and has identified a mission consistent with the purposes of a regional laboratory. The area it focuses on is assisting educational and other agencies to improve the quality and equity of education through research and development in basic and applied research and through technical assistance in identification, conceptualization, implementation, and evaluation of a variety of academic and vocational programs.

The overall impression is that the Lab interprets its mission in a manner consistent with NIE priorities. Its mission has been interpreted through a process of sensing needs, including expressions of priorities by the Executive Council, composed of the Chief State School Officers, and by a number of additional advisory and governing boards, composed of representatives from various educational, business, and Government groups.

In this effort at needs sensing, however, the Lab must continue to search out constituent groups whose needs may not yet have been identified. It is entirely possible that because of the composition of the Executive Board of the Lab and of the advisory and governing boards of some of the projects, certain groups that have very pressing needs in terms of quality and equality of education may not be receiving the attention they need to improve their educational opportunities. The Lab is urged to continue working with these community groups to encourage the diversity of representation that will ensure an adequate feel for their needs.

The Lab has developed cooperative activities with numerous educational institutions throughout the country, attempting to provide services through the implementation of programs developed to address those needs or similar ones. In this regard, the Lab addresses more than regional needs and priorities.

In addition, the Lab has developed excellent working relationships with local universities in informal approaches that depend on identified needs and problems. The Lab is urged to continue these informal efforts, but it is also urged to try to find ways in which more formal agreements can be obtained with the universities, through which problems and needs related to teacher education, certification, and inservice education can be addressed.

Institutional Governance, Accountability, and Self-Evaluation

The chief policymaking body of the Lab is the 26-member Board of Directors, drawn from the region. The seven Chief State School Officers from each State and territory in the region (Alaska, Idaho, Montana, Oregon, Washington, American Samoa, Guam, and Hawaii) are permanent members of the Board. Member institutions elect 10 Board members for 3-year terms. The Chief State School Officers and the elected Board members appoint nine additional Board members for 3-year terms. The nine appointed Board members represent such constituencies as classroom teachers, higher education, teacher organizations, university faculty, etc. The Board meets quarterly. The team visit coincided with one of the meetings of the Board, affording an unusual opportunity for the team to observe the close interaction between the professional staff of the Lab and the members of the Board.

The team feels that the procedure for assessing regional needs represents a major strength of the Lab. Surveys, questionnaires, telephone contacts, and attendance by the staff of the Lab at meetings of the Chief State School Officers and other groups concerned with educational policymaking provide the Lab with an ongoing procedure for determining the needs of the region and for formulating programs to meet those needs. Attendance by team members at meetings between the staff of the Lab and the Board of Directors made it possible to observe the Lab's anticipation of regional needs before they had

surfaced as concerns felt by constituents. The particular example observed by team members involved anticipation by the Lab of how it might serve client Local and State Education Agencies (LEA's and SEA's) in the formulation and implementation of procedures for responding to the new Federal guidelines concerning health education curricula in the schools. In the view of the team, the process by which the Lab determines the impact of national developments in education on SEA's and LEA's and assesses what services it might provide once that impact is perceived is both enterprising and reflective of a significant role that Labs could play.

An unusual feature of NWREL is its relationship with 812 member institutions. Any institution, organization, or agency within the region that has an interest in the work of NWREL and has a governing board may apply to become a member institution upon adoption of a resolution by its governing board. This unique organizational feature provides NWREL with three assets. First, it ensures that a large number of such organizations within the region will be continually aware of the activities of the Lab and the services it provides. Economically, the member institutions represent a prime market for the Lab's products. Second, the arrangement creates a diverse constituency, which could help to win support for Lab activities among important community groups. Third, the member institutions might serve as a source of field studies or other data-gathering activities essential to the effective operation of the Lab.

The strength of the member institution arrangement could be of interest to other Labs. Opportunities for them to study such procedures could result in activities that would improve organizational styles.

At present, membership in NWREL entails no financial obligation, and the team suggests that NWREL consider requiring a minimal annual membership fee. A $25 fee per institution would provide over $20,000, which could help NWREL to meet the cost of the newsletter and other expenses incurred in working with the member institutions.

As presently constituted, the 26-member Board of Directors of NWREL includes one position for a representative of a "professional teacher association" and two positions for "classroom teachers." This arrangement appears to be somewhat unreflective of changes that have taken place in the last 10 years, such as the growth of teacher organizations and new approaches for obtaining teacher representation for school districts and commissions. Simply stated, there is ample evidence that teachers believe that representatives of their viewpoints should be chosen by teachers through their designated professional organizations. In the case of NWREL, the two classroom teachers and the professional teacher association member are chosen by 17 other Board members (the 7 Chief State School Officers and the 10 members elected by member institutions). The team suggests that the matter of teacher representation on the Board of Directors be reexamined and that the procedures for obtaining teacher representation on the Board be clarified for the two major teacher organizations that represent the majority of teachers within the NWREL region. (The Education Association represents the majority of teachers within the region except for Guam, where the American Federation of Teachers is the bargaining agent for all teachers.) In addition, the team suggests that the present ratio of classroom teacher representatives to school administrators (three to nine) bears reexamination.

It is clear that NWREL has attempted to create a Board that represents many of the ethnic and racial groups in the region. The team observed, however, that there was only one black person on the 26-member Board. Three new appointments were made to the Board at the most recent meeting; none of the appointees was black. The team suggests that the Board address the apparent underrepresentation of black and other ethnic minority people on the Board when making future appointments.

Internal Evaluation Procedures

Thirteen policy and advisory groups work with NWREL in programs throughout the institution. The primary responsibility of the policy and advisory groups is to help plan, review, and assess NWREL programs.

In addition to the activities of the policy and advisory groups, the following procedures are followed to ensure a comprehensive internal evaluation:

1. periodic reviews of programs conducted by division directors and the Board of Directors;

2. consultant review panels to advise program directors;

3. NIE institutional monitor and NWREL staff reviews (this joint review has established a positive relationship reflecting a mutual trust and respect that enhances the effective implementation of NWREL programs); and

4. procedures to monitor the percentage of clients who request additional services from NWREL after their initial contact with the Lab (the high percentage of returning clients at the Lab suggests a positive evaluation of programs by those rendering final judgment).

The Institution's Activities and Projects and Their Impact and Usefulness

The team was impressed with the Lab's ability to identify regional and national needs and to develop programs and approaches addressing those needs.

The remainder of this section will discuss only two of the programs housed in the Lab. The committee felt that the other programs were successful in addressing their objectives and did not require specific comments other than those made during the visit. The two programs specifically covered have distinctive characteristics.

The Division of Evaluation, Research, and Assessment offers a variety of services through the Audit and Evaluation Program. It offers NWREL clients such services as:

1 third-party evaluation–impartial external evaluation of projects and programs;

2. evaluation consultation–assistance to local agencies in resolving evaluation problems; and

3. applied research–application of formal research procedures in seeking solutions to problems and providing information for decisionmaking.

At least five other evaluation services offered to clients are described in the literature on this program.

In addition to the services provided through the Audit & Evaluation Program, the division is engaged in an aspect of basic research that the team considers extremely important. Responding to a regional needs assessment indicating demand for more effective methods of evaluation, the division is attempting to gain insight into the process of evaluating programs related to education in order to broaden the range of evaluative techniques available, to perceive the problem of evaluation in new ways, and to provide data that offer a more valid basis for decisionmaking. The team regards NWREL's work on research in evaluation as important and believes that its development should be encouraged.

The Division of Multicultural Education addresses a problem area that offers an opportunity to bring the educational community closer to the ideal of equal educational opportunity. Its program has addressed several needs of the Native American population in the reading program. Reports indicate that the efforts of this group have been well received and are having an effect in the Northwest. The products of the reading group are finding wide acceptance, particularly in institutions of higher education in teacher training.

The work of the Lab in bilingual education, however, appears to be in need of review Several of the team members felt that the project involving inservice education with the Washington Education Agency has some inherent problems that may preclude its success. The process for identifying the model for developing awareness and commitment was questioned.

At least one member of the team felt that multicultural awareness in the Northwest is synonymous with awareness of the Native American cultures, excluding Hispanic and Black cultures because it is assumed that they comprise fewer people. Superficial first-time impressions, if they are that, could be corrected through a more aggressive approach on the part of the administration and the division director to promote the visibility of program efforts in this regard.

It was noted that the staff members in this division are the least prepared academically, especially compared with those in the Division of Evaluation, Research, and Assessment. It was also noted that none of the staff in this division is on a career course to prepare them through academic or work experience. Specific proposals should be written by the Lab and funded by NIE to place minority people and women in situations that would train them for leadership roles.

Personnel Management and Affirmative Action

Although the team noted moderate improvement during the past year at NWREL in the areas of personnel management and affirmative action, more improvement is needed and should be encouraged. An energetic new personnel director with many good ideas about how the Lab might improve in both these areas has been hired recently. There was concern, however, that with the flow of personnel actions in a Lab of this size, little time remains for an overall assessment of personnel needs and development of an adequate personnel management system. The team felt that this overall assessment and system development is crucial to improving the performance in several areas that concerned the team. Some of their concerns are discussed below.

There seems to be a high turnover of staff at the lab. Whereas some turnover is healthy and should be encouraged in a Lab where programs and projects change frequently, excessive turnover can lower efficiency and morale. In talking to staff, the team learned that some of the turnover was due to a lack of opportunity for career advancements. Although it was not uncommon to find clerical personnel with degrees, opportunities were not provided for them to work into the technical and professional positions that could logically follow from working experience gained at the Laboratory.

The Panel members also noted the paucity of women and minorities in executive, administrative, and higher level professional positions. The team was told that, in the Northwest, qualified women and (particularly) minorities were hard to recruit and retain. Under these circumstances, it would seem particularly wise to provide opportunities, both in training and experience, to prepare promising women and members of minorities already on the staff for higher level positions within the organizations. By providing such opportunities for staff development, the Lab would contribute to staffing stability, higher morale, affirmative action, and increased continuity.

On a related point, only one of the five divisions contains minority program directors. In this division (Multicultural Education), all three program directors and the division director are minority males. Likewise, only one division (Educational Services) has women program directors (three of the four, all nonminority). High-level vacancies currently exist in two program areas outside of those just mentioned and in the Office of Marketing. The Lab should make every effort to fill these vacancies with qualified women and minority candidates.

Because the team did not have sufficient opportunity to examine the Project for Women and Minorities in R&D, it was unclear whether the training provided was totally in the form of work experience on a single project. Since the attainment of higher credentials does not seem to be stressed, the team wondered whether this short-term work experience alone would heighten the intern's value on the job market.

Financial Management

The Lab has grown from an initial Bureau of Research funding in 1967 for 100 percent of its operating capital to the present level of 45 percent NIE funding, 30 percent other Federal funding, and 25 percent State and local funds.

The funding levels seem to be adequate for the various projects if one regards the mission of the Lab as addressing needs that can be funded by program contracts. There are some needs that the Lab cannot address in this manner. For example, the Lab does not have funding to allow for any needs assessment other than those called for in RFP's that NIE sends out. Yet there may be an outstanding need, entirely regional and peculiar to the Northwest, that NIE has not perceived. In this regard, the funding level for the Lab is not adequate.

The team was very much impressed by the management system developed by the Lab to monitor the progress of its projects and maintain records of fiscal management. The project management system is very simple and similar to that of fiscal accounting. The concept emphasizes continuous reporting and monitoring of all aspects of a project—funds, personnel and project activities, and required outcomes The degree of refinement of the system was also impressive.

A characteristic of this system of project management that appears to be unique is the tie-in between project management and project evaluation. This links accountability to the required end—the project. It would be well for Federal projects to emulate this type of accounting and to have other installations, including NIE institutions that do not have such sophistication in management, provide their staff with training in this and similar models.

General Comments and Summary

The team was pleased to discover the institutional strength and regional responsiveness of the Northwest Regional Educational Laboratory. In its Interim Report, the Panel questioned whether NWREL had too many projects and whether the staff's time and resources were adequate for them all. After visiting the Lab, the team was quite satisfied that the management system was sufficiently developed to deal adequately with all its projects and that, indeed, most of the projects were of great importance to the region, and in many cases to the Nation.

The team asserts that staff time and resources could be more efficiently used and coordination between programs more easily accomplished if NWREL were treated as an institution rather than as a composite of projects. The team also felt that a number of issues related to funding, personnel, and affirmative action raised in this report could be better addressed given institutional flexibility and stability. In this regard, the team recommends that NIE begin a long-term institutional relationship with NWREL.

The team encourages NWREL to continue its emphasis on R&D networking. With the proper resources, the laboratories and centers are in a particularly good position to foster this valuable communication system. In the more established areas of R&D (i.e., evaluation), the team was impressed with the amount of coordination and communication between NWREL and other institutions. In a few of the developing areas, however, the team suggested other R&D resources that should be tapped to provide the best results, e.g., some of the work in bilingual education.

Charles Thompson, the NIE institutional monitor assigned to NWREL, was visiting the Lab at the time of the site visit. The team was quite impressed by his relationship with the Lab and by his knowledge of its mission and operation. Although the team was certain that Mr. Thompson would be constructively critical of the Lab should the need arise, the sincerity of his support of the Lab and the seriousness with which he has accepted his charge to maintain and further its strength is evident. It should be added that the Lab's personnel shares this opinion.

In closing, the team wishes to note that the suggestions and recommendations made at NWREL in this report are made freely, because the team is convinced that the suggestions will be seen as constructive and that the reaction by the Lab will be one of responsiveness (an enduring characteristic of this institution). NWREL should be seen and treated as a valuable resource to NIE and the Northwest region.

RESEARCH FOR BETTER SCHOOLS

Philadelphia, Pennsylvania

The Research for Better Schools (RBS) site visit was particularly important to the overall work of the Panel for the Review of Laboratory and Center Operations. Earlier in the year, a report submitted to NIE by the Panel indicated several reservations about the 5-year plan proposed by RBS, but the site visit has resolved the principal concerns raised by the Panel's initial review. The specifics thought to be missing in the 5-year plan have been provided in detailed proposals developed in support of that plan. Therefore, the site visit team reaffirms the Panel's interim recommendation that NIE establish a long-term relationship with RBS.

Our visit tended to focus on resolving the issues raised in our review of RBS' plans. However, the following report summarizes all of our general impressions of the Lab and its operation.

Institutional Definition and Mission

The site visit team finds that Research for Better Schools has a clearly and comprehensively defined mission. In the years immediately ahead, RBS proposes to improve schools through research by working closely with the State educational agencies in its region. RBS seems committed to helping schools improve by applying research and development in ways that link schools and educational agencies closely.

The staff members have a clear conception of RBS as an institution, as do practitioners in the field. The latter have no difficulty identifying RBS as a major R&D resource in the region.

However, RBS staff candidly acknowledge that the service concept of their mission is a departure, although a natural evolution, from the work they have been doing over the past 5 to 8 years. By focusing on what needs improvement in schools and defining the research and development to be done in terms of that improvement, RBS has begun a process with some built-in uncertainties. It will mean changes, particularly in the concept of development, but also in the locus of initiative and identification of that development. RBS appears ready for the challenge and displays a suitably broad array of professional talent and capabilities.

RBS' sense of identification with its mission has had a certain tentative quality to it, a result of continuing uncertainties about the nature of its relationship with NIE and what a long-term institutional commitment means. The immediate question facing RBS is how heavily it should rest on its own institutional self-definition. The prospect of corporate pressure causing RBS to function in a "job-shop" capacity is clearly distasteful to its management, Board, and clients alike; but survival instincts could impel them in that direction.

Institutional Governance, Accountability, and Self-Evaluation

There were indications that the governing Board of Directors is active in setting the policy and direction of the Lab. The institution's goals are broad, but they provide a base for evaluating the Lab. In the annual report, a good amount of

attention was given to the progress made in achieving them.

The membership of the Board seems representative of its constituents, although the Panel members encourage greater representation of women and classroom teachers as openings develop. Board members appeared to be well informed about the operation of the Lab and the prevailing financial conditions.

There was some indication that the Lab recognizes the limitations of relying too heavily on internal evaluation measures, but funding limitations were said to be the major reason for limiting the scope of the evaluati effort. One measure of the Lab's accountability comes from feedback from constituent groups. The Panel members commend the Lab for seeking its clients' reactions.

Evaluation of the Lab by NIE's staff seems to have been erratic and even disruptive at times as a result of a turnover of NIE project officers.

The Institution's Activities and Projects and Their Impact and Usefulness

It should be noted that the visiting team reviewed only those programs funded primarily by NIE. Our observations on these programs are as follows:

Basic Skills The Basic Skills program seems to be the principal work of the Lab, reflecting the emphasis on improvement of basic skills instruction by the three States served. The project builds on the concept of having a Basic Skills Improvement Team in each of the schools involved in the project. Materials and procedures will be developed to expedite better classroom instruction by individual teachers under the leadership of the team. State and intermediate county governments and districts will be involved during the development stage. The staff members hope that after approximately 2 years the projects will be ready for extension to many other State entities. The concept looks valid and, if not expanded beyond a limited number of variables, should be helpful to the various school units. Involvement of higher education personnel in the local projects should be encouraged.

A timetable terminating in the spring or summer of 1980, rather than at the current November 1979 ending point, would probably be more realistic. This extended timeline would allow materials and manuals to be developed in the 1978-79 school year, after which each school would use the pilot products and processes in the 1979-80 school year. This is an instance in which the 18-month funding assurance by NIE could force premature termination of an approved program whose nature requires it to complete at least a normal school-year cycle to be of value.

Citizenship Education The Citizenship Education component, a product of the interest expressed by two State departments of education, proposes to develop a process by which a school can prepare a citizenship education program. In addition to refining the process, the four pilot schools will produce models that can be considered by other schools.

The visiting team agrees that citizenship education is an area that should be more effectively implemented. From the presentation to the committee, the Panel felt that the program needs to be more clearly and briefly defined and presented.

Career Education Most of this program's effort is devoted to finishing the Lab's portion of a national Experience Based Career Education (EBCE) project. The team found the plans sensible and promising.

RBS hopes to work with the States it serves to help them implement the career education aspects of their school improvement programs. The Lab's EBCE experience should provide a useful background for working more flexibly with local districts to help them reach their own goals in career education. We suspect that the States' goals are less clear in this area than in, say, basic skills. Working out a mutually acceptable program might take some time and a good deal of further negotiation.

Field Studies The team noted that the plans for field studies have been considerably elaborated and modified. Our understanding is that this program is now devoted mainly to a study of "the school improvement process." That is, the field research group will assess RBS' programs to help the States implement their school improvement plans in basic skills and career and citizen education. The group will try to learn from the results of those programs what factors decide the success or failure of such plans and then develop and adapt models to help other local schools. RBS' leadership indicated that they see this component as the Lab's mechanism for "quality control," and we agree that it is a potentially useful system of formative evaluation. Certainly, it is a promising idea that States can put schools under affirmative obligations to get goals and to modify programs if those goals are not achieved, and that this obligation will impel schools to reach out to take advantage of research and development ideas and products, particularly if they have some financial and practical support in doing so. Yet that idea is somewhat uncertain. It is important to make a very careful study of when and how programs work.

The new proposal contains a reasonable description of the more recent literature on change in schools and a good set of guesses about what characteristics of local and school "context" are most important in successful efforts to help them improve their effectiveness. The team feels that the effort to specify these characteristics and to begin to examine ways of measuring them has been helpful, leading to a useful set of working ideas about what features to look for. We were concerned, however, that this effort not lead to overspecification and such a proliferation of instruments and measures that the process be obstructed in the name of preciseness. We doubt that this process will soon result in rigorous conclusions about the correlations between the characteristics of a school and the success of its improvement strategy. We recommend flexibility and wisdom over a premature attempt at rigor, although we accept the heuristic value of the current effort to be specific and to summarize the earlier literature.

We also feel that the proposal might concentrate too exclusively on local school experience. A key element of the RBS strategy is to invite intermediate agency and State people to work side by side with them in the pilot schools. The models developed in that work will form a basis for training other intermediate and State personnel to take the process to other districts and schools. The conditions under which that aspect of the strategy succeeds or fails should also be studied. Certainly, the characteristics of the States, intermediate agencies, and districts must be seen as important aspects of the local schools' "contexts."

Dissemination and Management Services The site visit team finds the dissemination staff highly capable, nationally respected, and actively involved in developing national dissemination activities. It is clearly making substantial contributions to the regional exchange network and can be expected to deliver services to it as well as to the further development of the dissemination concept.

In the management services area, the team found a particularly valuable set of functions being performed in connection with urban school services, desegregation, and teacher evaluation, to name just three examples. We suspect that NIE is not very aware of what is being done here, but its value is so obviously high and the character of the activity so clearly in tune with what regional educational research laboratories ought to be doing that we wanted to declare and underscore our positive feelings.

Evaluation Evaluation activities in the Laboratory are designed to serve ongoing programs in RBS and to generate external support through competitive bids to do work needed and desired by educational agencies, principally at the local and intermediate levels. The activities of this staff have been largely responsible for the sharp increase in receipt of non-NIE funds in the past 3 years. Although the original purpose in setting up the staff was to serve RBS' immediate evaluation needs and although staff are assigned to program evaluation activities accordingly, they do in fact maintain their present level of effort by active pursuit of non-NIE funds. The staff compete well with the Educational Testing Service and have managed to get repeat contract and grant awards, an important indicator of client satisfaction.

Women and Minorities Research for Better Schools is to be commended on its program for women and minorities. The program is clearly defined and provides training in the management of R&D functions. The staff members are competent and are involved in five other projects, which are in various stages of development.

Urban Education Urban Education is a new program direction, currently led by one individual who seems to have a good background for the assignment. He is sensitive to the dynamics of urban school systems themselves, which involve the internal pressures of any large school district, and also to the political, social, and economic forces in the community that have great influence on urban schooling. A major conference on urban education will highlight some of the program's first activities.

Personnel Management, Affirmative Action, and Financial Management

Personnel management procedures are comprehensive and well developed. One important indicator of employee satisfaction is the large number of employees who have been with the Lab for a number of years, a characteristic of the Lab that has proven an advantage in recruiting new staff. Only three employees have brought grievance actions during RBS' lifetime. One was resolved at the Board level, the other two by the human relations commission in favor of RBS.

The Lab has made important strides in affirmative action. Earlier Panel concerns about affirmative action and Board membership have received attention. The Board has been expanded, and the new members were selected with

special attention to the need to represent women and minorities more adequately. We still note the absence of women and minorities in the senior management staff. We do not intend by this observation to suggest immediate changes—only that the Board and the Executive Director keep the matter firmly in mind as changes occur in the future.

Systems for financial management ensure that the Board, Executive Director, and program managers alike have sufficient information to keep regular account of expenditures, both overall and by object category. The site visit team shares the deep concerns expressed by the Executive Director regarding the implications of losing the management fees and the extremely precarious position in which this places RBS, especially in light of the Board's past commitment to the support of research-related services that have not always been subsidized by NIE or the recipient agencies. Whereas other labs have maintained a somewhat larger cash reserve, RBS' position is particularly acute, suggesting that something must be done promptly, even before the end of the present 18-month grant period.

General Comments and Summary

1. In the judgment of the visiting Panel members, RBS is capable of carrying out its proposed activities. Staff members appear particularly sensitive to the protocols of the systems being served and to the need to relate the Lab's activities to individual State programs and priorities.

2. The panel felt a need for some of the various program components to be interrelated and supportive of one another.

3. Maryland has become involved with RBS for the purposes of the Regional Development Exchange program. Although such a recommendation is possibly beyond the scope of the visiting Panel team, it seems desirable that Maryland be approached to consider full membership with RBS.

SOUTHWEST EDUCATIONAL DEVELOPMENT LABORATORY

Austin, Texas

Institutional Definition and Mission

The mission of the Southwest Educational Development Laboratory (SEDL) is consistent with the purposes of a regional educational laboratory, reflecting an appropriate mix of behavioral and social research, development of products and processes, dissemination, and technical services. It is also consistent with the charter by which this Laboratory was incorporated in the State according to Federal guidelines. SEDL has conducted an extensive and systematic survey of needs throughout its six-State region, covering a representative sample of people with an interest in education, from students, parents, and teachers to several levels of educational administrators, political leaders, and various agency representatives. Its present mission is responsive to

the findings of this needs assessment and takes into account predicted educational developments and staff and Laboratory capabilities. The visiting team observed that local schools are pleased with and appreciative of the services provided by SEDL.

From a substantive standpoint, SEDL has three major points of focus:

1. Meeting the educational needs of special populations, such as those characterized by distinctive languages or cultures, by physical or mental exceptionalities, by socioeconomic level, by age, or by level of functional competency. This focus is illustrated by NIE-funded projects on bilingual education and by the project on cognitive styles among various groups of language-minority children.

2. Understanding the intraschool and extraschool social influences on schooling and learning, as illustrated by the NIE-funded projects on family and community studies, the parenting resources implementation model, the projects on television and family life, and the newly initiated project on ways to improve education in desegregated schools.

3. Linking potential users with systematic, cost-effective educational solutions. This objective is approached through such activities as expanding the knowledge base of appropriate research; developing educational materials and methodologies; and training, evaluation, dissemination, and other technical services. The NIE-funded Regional Exchange Project fits into this category.

With regard to the Panel's concern (from review of 5-year plans) that SEDL might be taking on too many programs, the visiting team has several observations. First, all the projects appear to be consistent with SEDL's mission and related to NIE priorities. They are responsive to regional needs, which accounts in part for their diversity. Several fit logically into groups and are mutually supportive in their findings. Such interrelation of projects applies not only to NIE-funded projects but also to projects funded by other sources, which account for approximately half the Lab's funding. For example, products and processes developed in projects on bilingual education are being successfully utilized in the Basic Skills Learning Center Project, funded by the Community Services Administration, and in the Follow Through Program, funded by the U.S. Office of Education (USOE). In general, the projects included in each of the three major substantive divisions also represent units within which mutually beneficial relations are possible with regard to staff consultation and improved interpretation of results. Many of the services and training functions, moreover, make use of findings and products from other Lab projects. These mutually supportive relationships among projects could probably be enhanced by funding policies that were not program restricted.

The team does have certain recommendations regarding the organizational unit called "Other Research," for which there is no division director. This point is considered below.

Institutional Governance, Accountability, and Self-Evaluation

The team commends SEDL for its efforts to increase the number of women (7) and minorities (10) on its governing Board. The 21-member Board, which meets three times each year (June, October, and February), makes policy for the

Lab. The Board was involved in developing the mission statement and the survey of needs. The Board has been influential in effecting changes at the Lab, which has been receptive to its recommendations.

The Executive Committee (four officers and four persons elected from within the Board) meets as often as needed between regular Board meetings. The Board is also involved between meetings through ad hoc committees for specific needs. New Board members are brought in early for an orientation to the work of the Lab.

Evaluation procedures include the following:

1. Outside sources review proposals before they are presented for funding.

2. Each project has evaluation activities; some have Advisory Committees.

3. The Division Director and the Executive Director conduct regular reviews for internal evaluation.

4. The Director of Research is available for an audit. For example, the Regional Planning Project is being reviewed in terms of the objectives that have been set for the project.

5. Outside consultants conduct institutional reviews. Two of these have been held in the last 4 years.

The Institution's Activities and Projects and Their Impact and Usefulness

Division of Bilingual and International Education The team expressed support for the bilingual programs and felt that their objectives facilitate staff development for teachers who work in bilingual and desegregated settings and for school districts under Federal and State court orders.

The team further expressed support for proposed program expansion with a focus on multicultural programs and systems concerned with children in a pluralistic society.

Collaborative efforts of the project's staff with the staff of other laboratories and centers (e.g., the Research and Development Center for Teacher Education, the National Center for Research in Vocational Education, and the Center for Educational Research at Stanford) in the development of bilingual assessment instruments and procedures were highly praised and appreciated by the team.

In its meetings with staff and its examination of research materials, the visiting team devoted special attention to clarifying the project on Cognitive Styles of Language Minority Children. The Panel had been concerned about the educational implications of this project, the balance between basic and applied research, and certain questions of methodology and interpretation. The team learned, first, that the project is directed specifically to bilingualism in its various forms and to the problems of *linguistic* minorities. If positive results are obtained in the research and substantial significant differences are found among the groups investigated, such findings should lead to the development of appropriate instructional strategies for effective teaching of bilingual children, thus feeding into some of the other projects. A second fact that emerged from the staff discussion was that this particular research on cognitive styles was initiated in response to the "Lau Guidelines" of the Office of Civil Rights, which stress the need to

adapt school instruction to alleged differences in "learning cognitive styles" of "linguistically/culturally different students." The existing research base for such differences is meager and dubious, and the cognitive styles in question are not adequately established. It was in an attempt to investigate these basic theories, which are prematurely influencing educational policy and practice, that the study was undertaken. Under these circumstances, the present research effort seems justified. The instruments and procedures employed are generally satisfactory, although some require validation, and their relation to the child's actual educational performance needs to be demonstrated for all the instruments employed. The visiting team was informed that these are primary objectives of the current research. It may also be added that this research is the direct result of the findings of the 1976 National Lau Conference convened by SEDL with NIE funding.

From another angle, the team felt that the effectiveness of the Cognitive Styles of Language Minority Children Project is weakened by the fact that part of the staff is located in Oakland, California, and not in Austin, Texas.

Division of Community and Family Education In this division, one project, Family and Community Studies (FACS), represents an initial effort to identify ongoing parent education programs for early childhood education and to gather data about them through observation. The populations studied include several low-income and bilingual groups. Another program in this division, the Parenting Resources Implementation Model (PRIMO), deals essentially with the dissemination of information for parents and parent education personnel. The program is now operating with an extensive collection of materials (printed matter, tapes, films, toys, etc.) that have been identified, cataloged, described, and indexed. Effective mechanisms for distributing this information have been established.

A third project, Ways to Improve Education in Desegregated Schools (WIEDS), is now in the preliminary planning stages; hence it would be premature to evaluate it. The team felt that this is an area where research is sorely needed and has expressed great interest in the project's outcomes. The team suggests that the project staff also consider identifying criteria for successful school desegregation strategies, as well as conducting further research inside and outside the SEDL region.

Division of Field Services and Dissemination SEDL operated one of the seven regional exchanges involved in the NIE Research and Development Exchange (RDx) and is considered a leader in the effort. Through five State Educational Agencies (SEA's) and the USOE Regional Office, SEDL is working to improve practitioners' access to R&D outcomes. As part of their efforts, they have assisted the SEA's in establishing plans for dissemination to enable State and Federal programs to operate on a collaborative basis and are providing training to assist the SEA's in developing their plans. Further, they are providing the SEA's with information and training on putting R&D products to use. To evaluate the effectiveness of their efforts, SEDL is collaborating with RDCTE personnel, who are researching the implementation of innovations.

Judging from the success of SEDL's initial efforts, the team felt that with increased funding and staff, systematic processes for receiving direct feedback and input from practitioners both on the usefulness of the R&D products and on

the direction of the R&D program agenda could be established.

Other Research The team expressed concern that six of the smaller projects report directly to the Executive Director. The team felt that the direction of these projects might be better facilitated if each were assigned to a division director; e.g., Television Research to the Division of Community and Family Education; Sociolinguistic Research to the Division of Field Services and Dissemination. Another possibility for these six projects would be the assignment of one director, other than the Executive Director, who has many other responsibilities.

The Sex Roles and Occupational Aspirations Project could be strengthened by establishing communications with other laboratories and centers and research organizations that are working in this area.

Regional Planning Project The Panel members were impressed with the relevance and practicality of the Regional Planning Project. This evolutionary planning process could serve as a model for education leaders to follow as they work with policymakers in each State.

Personnel Management and Affirmative Action

The team was favorably impressed with SEDL's success in personnel management and recruitment of both women and minorities. They have addressed the Panel's concern regarding affirmative action plans and have a 10-year record of having more than 25 percent of staff from the Hispanic community. Presently, they are working to increase the number of blacks, Asians, and Native Americans on the staff.

Since SEDL appears to have overcome some of the affirmative action recruiting problems that other laboratories and centers are having, it represents a valuable resource that needs to be made more directly and systematically available to the others. The team recommends that NIE consider making funds available for joint meetings of the personnel directors of the laboratories and centers for this purpose.

SEDL is providing R&D management training for advanced doctoral candidates, which will result in fully trained professional women and minority researchers capable of filling higher level research positions. This group of interns has had input into modifications of the training program design and has commented favorably on the quality and sincerity of the training effort. SEDL is also assisting the interns with job placement but has not established systematic recruiting linkages with other laboratories and centers. The team stresses the definite need to establish this job placement assistance as a component of all the laboratories' and centers' women and minority training programs. It should be noted that SEDL's original proposal for the training of women and minorities was used by NIE as the discussion model for proposal guidelines adopted in this area.

Financial Management

Approximately 45 percent of funding for the Lab comes from NIE grants. The team was highly impressed with the excellent and proficient management system of procedural operations that facilitate accurate accounting for all expenditures, encumbrances, and balances.

Functions of the SEDL management system that the team found unique and highly commendable include:

1. Valid, reliable monthly computerized financial statements that facilitate budget transactions in each of the project areas to reach goals in order of priority.

2. Appropriate and highly qualified personnel who direct and forward information for budget transactions within the Lab.

Although the financial management system functions at a high level of accountability, the team felt that NIE should grant greater flexibility to the Lab to modify its budgets between projects whenever needed to support the goals of highest priority based on continuous evaluation and needs assessment. Also, greater flexibility could be available to the Lab if NIE ensured mechanisms for cost-plus-fixed-fee type of funding.

Finally, the team highly recommends that NIE provide a mechanism to include adequate funding for the Lab's 3- to 5-year plan in NIE's annual appropriation request (currently FY 1980). This recommendation includes the request that NIE report its laboratory and center appropriation requests to the Panel.

General Comments and Summary

The site team was pleased to find that many of the questions raised in the review of SEDL's 5-year plan were satisfactorily answered during the site visit. The team has summarized its general reaction into four broad areas: SEDL's role as a forerunner in addressing critical issues, institutional relationship, staffing, and development and dissemination.

SEDL's Role as a Forerunner in Addressing Critical Issues The team commends SEDL for the role it has assumed in addressing critical issues before they become popular and federally funded R&D efforts. For example, SEDL was a proponent of R&D in the areas of bilingual education, cognitive learning styles, successful school desegregation strategies, and programs to increase the participation of women and minorities in educational R&D when all these were regional needs instead of national priorities.

Of special interest to the team was SEDL's current effort to increase educational policymakers' awareness of the needs of their constituents. Considering the current political situation with regard to [illegible]m, the team felt this project to be one of [illegible]tical importance.

Institutional Relationship The site team agrees with the Panel's recommendation that NIE establish a long-term institutional relationship with SEDL. Such an institutional relationship would enhance the coordination of the various program efforts. The current funding policy allows no fiscal management discretion within the Laboratory. The institutional relationship, if properly structured and funded by NIE, would return to the SEDL Board of Directors, the staff, and the region some of the program responsibilities that existed before the current funding policy. In view of the consistency of the vast majority of SEDL's current regional projects with NIE priorities, such a relationship seems justified. In structuring the institutional relationship, NIE should include a management fee or other discretionary funding to allow SEDL enough flexibility to continue to identify critical areas before they receive popular attention.

The Panel was pleased that SEDL's new institutional monitor seems to exhibit many fine qualities in his newly assumed (and established) role. We hope that this supportive but critically evaluative relationship with an NIE employee

will foster more harmonious relations between the two institutions.

Staffing The team felt, as noted earlier, that SEDL's staffing procedures are superior to those of many of the other laboratories and centers. In addition, the team commends SEDL's development, career ladder arrangements, staffing methods, and staff relationships. Other centers and laboratories, and even NIE itself, could benefit by following SEDL's model of continually attending to important staffing issues.

Development and Dissemination In its Interim Report, the Panel commented favorably on the regional services that SEDL provides. The team was concerned, however, that NIE's current deemphasizing of development prevents the translation of SEDL's efforts into processes and products directly applicable to schools.

In addition, Federal dollars for dissemination efforts (despite NIE's dissemination priority) have not been sufficient to get existing materials into the hands of those who need them most. The team was impressed that, despite the financial limitations, SEDL's RDx has emerged as a model within the RDx system.

In conclusion, the team felt that the Laboratory is a valuable resource to its region and that more funds should be made available for its development and dissemination efforts.

SOUTHWEST REGIONAL LABORATORY FOR EDUCATIONAL RESEARCH AND DEVELOPMENT

Los Alamitos, California

Institutional Definition and Mission

The Southwest Regional Laboratory for Educational Research and Development (SWRL) has two general mission statements. A statement of the Lab's legal mandate says that it is "to conduct educational research in order to solve the problems and to serve the needs of the public and private schools, colleges, and universities of the region." The second mission, as shown in the history of the Lab's operations, stresses "(1) research and development efforts affecting instruction, (2) research on conditions of learning and schooling, (3) generation of usable professional 'tools,' and (4) dissemination procedures." The Lab staff feel that evidence accumulated over the last 12 years verifies its effectiveness in carrying out these missions.

Four recent extensions of the mission statements cover future efforts. These are (1) a greater focus on the organizational system and units in education, (2) consideration of the complexities of costs and implementation practices of R&D efforts, (3) a more participatory orientation in future SWRL activities in the region, and (4) concern with the utility and impact of the Lab's products.

In pursuing these directions, SWRL seems cognizant of the importance of coordinating its mission with that of NIE and with the mission and needs of the constituent groups it serves.

Institutional Governance, Accountability, and Self-Evaluation

Twelve members of the Board of Directors are appointed by the signatory agencies of the Joint Powers Agreement that established SWRL; six more are appointed by the Board. Some current members have served as long as 10 years, giving the Board considerable continuity. The Board believes that through this method of appointment it represents the varied interests in the three States involved in the Joint Powers Agreement. The Board assured the team that it is giving attention to the appointment of women, minorities, and representatives of organized teacher groups both in urging the signatory agencies to look to this issue and in choosing its own members. However, because of the current length of members' terms, little change can be expected soon.

The Board meets quarterly, three times each year in various communities in Arizona, California, and Nevada to provide opportunities for input from constituents. There are three standing Board committees: Program, Laboratory Relations, and Finance. Each of the 12 Board members is accountable to the signatory agencies of the Joint Powers Agreement.

The Laboratory's management is accountable to the Board each year for (1) the institution's performance, goals, and objectives; and (2) evaluation of specific projects and programs. However, the Board determines policy and participates in establishing 1- and 5-year goals.

Internal accountability and evaluation seem to be determined by (1) examination of the needs of the constituent groups, (2) response to requests from constituent groups for assistance, (3) use of the materials produced by the Lab and the technical assistance they provide, and (4) acceptance of materials by the publishing industry. In addition, periodic evaluations of specific programs are routinely conducted by the staffs of outside funding agencies and their consultants. All evaluations are considered by the Board at their quarterly meetings.

The Institution's Activities and Projects and Their Impact and Usefulness

SWRL has a complicated way of describing its projects and programs, but we think mentioning a few of its main activities will give the flavor of the Lab's work.

From its early days, the central activity of SWRL has been production of high-quality elementary education materials to be used in the classrooms of the region and, where appropriate, elsewhere in the country. In the basic skills areas, these efforts have produced a Communication Skills Curriculum, with materials in reading, spelling, composition, and expressive language; two kindergarten programs (the Instructional Concepts Program and the Beginning Reading Program); and some mathematics materials. A similar effort is underway in the bilingual/bicultural area, producing instructional materials in Spanish and English, both for Spanish-speakers. The focus of the materials is primarily linguistic, but cultural content also receives attention. Another activity has produced music and art programs for use by nonspecialist teachers, which SWRL feels are particularly helpful when school fund shortages result in reductions in arts specialist staff.

All these materials, in accordance with SWRL's fundamental approach to instruction, are accompanied by assessment systems to track

student progress in the specific skills being taught and by materials to give districts and other users assistance in the training and adaptation necessary to install the Lab's products. SWRL uses the term "product system" rather than "curriculum" for its materials as a way of highlighting these additional features. The information from the assessment that comes with the product is fed into an instructional information system, which then summarizes the data in ways that are useful for various audiences—individual students, parents, teachers, and administrators.

The work on assessment techniques specific to the SWRL materials and the effort to design information systems appropriate to those materials have led to at least two semi-autonomous capabilities and activities. One is a general interest in the design and supply of assessment systems that provide information more appropriate to schools' instructional objectives than do conventional standardized tests. This capability is becoming increasingly useful as more school systems look to SWRL to help establish methods of grade-to-grade promotion or more general "competency" testing. The other is a program designed to take advantage of all the information generated by the installation of the Lab's curricular materials and their respective assessment systems. To begin to look at that effort, the "Schooling Effects Program" seeks to determine what kinds of school practices impact on student performance. At this stage, such work comes close to "basic" research, but it should have early feedback into curriculum design. (Early results seem to show that some aspects of the standard American curriculum place limits on the performance of many students.) It could produce reassuring evidence that schools can, in fact, be effective if learning is measured in the areas in which the schools are actually trying to teach.

SWRL also maintains a maximum capacity to give technical assistance and respond to the needs of districts in its area. The staff who perform those functions are now also responsible for SWRL's recent participation in the Research and Development Exchange (RDx). The technical assistance is oriented first toward SWRL's products; but, where appropriate and where the staff are aware of other resources, it extends beyond SWRL's own work. Services run the gamut from simple provision of information through "hand-holding," workshops, conferences, and, at least in the Lab's proposal for "participatory research," longer term direct work with schools. For the most part, these services are free.

With respect to use and effectiveness, we understand that a large number of children (on the order of 1 million) are using SWRL materials in any 1 year—in up to 900 districts. SWRL keeps records of this use and of the calls and requests for help they receive, and the data demonstrate a significant level of use and need. SWRL's kindergarten materials are also widely used. On the other hand, we learned that sales of the Lab's elementary-grade communication materials are rather low (at least in terms of SWRL's ambition, although perhaps not when compared with general experience with R&D products). We sense that there are similar problems in promoting the use of the Lab's other materials, particularly after they are turned over to commercial publishers. The team wonders whether the lessons SWRL and other curriculum developers have learned about what it takes to impact on schools do not imply that all labs and centers should give more attention to the issues of dissemination and technical assistance. We note the shift in their language, but we urge them to translate those sentiments into a more attentive analysis of the experiences

of the past decade-- and a stronger case for the resources that they will need, both from NIE and from the districts themselves, to ensure that their work has sufficient final impact to justify the effort and cost involved.

Personnel Management and Affirmative Action

The team is impressed with the tenure of management-level staff, most of whom have been with SWRL from 7 to 12 years. These staff members include the Capability Unit Head, the Program Area Coordinators, and the SWRL Directorate. Each member of the Directorate has been with the Laboratory since its inception in 1967. The staff members seem competent, enthusiastic, and dedicated to the Lab's work. The Directorate is responsible for the employment and direction of the staff.

The staff members are part of the internal evaluation team, which measures effectiveness by examining the reactions of constituent groups and deciding what changes are needed in SWRL's activities. The Lab's financial and management procedures are evaluated annually by an outside consultant, who makes a report to the Board.

The team was pleased by the progress SWRL has made in increasing the number of minorities and females on its professional staff. Since January, it has hired ten new staff persons, seven of whom are females or minorities or both. The team was also pleased to note that SWRL's affirmative action efforts result in the hiring of qualified personnel. In addition, SWRL was operating two successful female and minority internship and on-the-job training programs, which had excellent placement records and reputations for providing quality personnel. These programs, unfortunately, were cut when SWRL's funding level decreased.

SWRL has submitted to NIE, as part of the development of a Center for Minority Studies, a plan to provide opportunities for women, minorities, and handicapped persons on the doctoral and/or postdoctoral level for conducting research on bilingual education under the tutelage of SWRL's staff. Under this program, the Lab hopes to recruit people who could contribute useful research on one of the region's R&D priorities while gaining valuable practical experience.

Financial Management

NIE provides two-thirds of the financial support for the Lab. Funding reached a peak of $3,450,000 from the United States Office of Education (USOE) in 1972, but it has decreased to $1,943,000 in 1978 and $1,904,000 in 1979. This necessitated the reduction of professional staff from 114 to 56 and, of course, a reduction in programs.

SWRL is considering staying in the building now housing it, which was built with a grant from USOE. Although the whole building is not in use, maintenance costs are less than leasing considerably less space elsewhere would be. The building is more than adequate; production facilities are good; and computer service is available at low cost from the University of California at Los Angeles and other institutions.

The Lab has a financial officer, who is one member of the internal management team. The financial management appears to be competent.

The team noted that a great deal of service is given to the region with relatively little financial

return. The Lab does contract with some educational systems for specific services, but this does not bring it a large amount of money.

The Lab has been very dependent on its management fee for cash flow and for maintenance of all operating reserve. Staff members feel that without the management fee or some equivalent their financial problems will be aggravated.

SWRL's leadership expressed a concern to us that the shifting requirements of NIE over the past years have imposed a burden of frequent planning, proposal writing, and amending that is difficult for their limited staff to carry. This seems distracting and wasteful to them. We recognize that NIE needs to have a clear understanding of the nature of the work it is supporting and what it can expect from the work, but we hope that the development of a concept of the "long-term relationship" will include careful attention to reducing the proposal-writing and reporting demands.

General Comments and Summary

1. The team felt uneasy over what has become an extensive mission statement. Each of the goals identified is defensible as a Lab mission. However, the team felt that the various statements should be condensed and combined to present a clearer program direction to the Lab's clients, who depend on the mission statement as a basis for judging the value of the Lab's efforts.

2. Programs should be more closely tied to the "mainstream" of education in the three States. This union is as much the responsibility of the States as it is of the Lab itself. However, greater effort must be made to have the Lab seen as a vehicle for solving statewide problems. The membership of the Board helps in this regard, but the three Chief State School Officers should participate in discussion and planning in a more systematic and direct manner. (If States participate in identifying problems for the Lab to work on, they should be committed to facilitating the necessary research and development activities.)

3. The team witnessed SWRL providing widespread assistance in classrooms, both inside and outside the region it serves. This is not evident in the documents previously made available to the Panel.

4. The staff told us that they attempt to share information with other laboratories and centers but that there is no formal mechanism available to facilitate this effort. SWRL has recently become a part of RDx, but this effort does not provide adequate systematic communication among labs and centers.

5. The team was concerned that, although the participating States use and praise SWRL's program, technical assistance efforts, and potential assistance, those States are not contributing funds to support these efforts. The team recommends that SWRL look for increased funding not only from NIE but also begin to solicit monies more aggressively from the States.

6. The team hopes that both NIE and SWRL view these comments as suggestions for strengthening the Laboratory as an institution. In that context, we reaffirm the panel's Interim Report recommendation that NIE and SWRL continue to move toward the establishment of a long-term relationship.

RESEARCH AND DEVELOPMENT CENTERS AND REGIONAL EDUCATIONAL LABORATORIES